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ADMISSION TO COLLEGE BY CERTIFICATE

BY

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TEACHERS COLLEGE, COLUMBIA UNIVERSITY
CONTRIBUTIONS TO EDUCATION, No. 50

PUBLISHED BY

Teachers College, Columbia University

NEW YORK CITY

1912

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11

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Aug. 10, 1881.

TO MY WIFE

PREFACE

The study here presented originated in the author's own experience. As Visitor of Schools and member of the Faculty of the University of Texas for some years, the writer has been called upon to assist in the adjustment and administration of entrance requirements. When information was desired concerning the practices relative to admission to college by certificate in other states, it was ascertained that such knowledge could only be obtained by personal correspondence with representatives of the different institutions. No general compilation and interpretation of the various methods used had been made. In response to the local need a large amount of concrete material was collected; the arrangement and interpretation of the more important part of the material thus gathered with other matter secured by visitation to various state universities may be found in this treatise.

A personal acknowledgment of all services rendered to the author is impossible. Hundreds of letters have been received; the associations and work with colleagues have clarified points and modified the author's views. The services rendered by the officials of state universities in opening their minutes to full inspection were invaluable. For such favors the author's indebtedness can only be admitted; it can not be liquidated. Each individual who has assisted must consider that he has joined in an effort to render some assistance in solving the general problem of admission to college by certificate.

Four names are gladly accredited with personal acknowledgments. To the late Dean F. W. Moore, of Vanderbilt University, with whom the author collaborated in a study of the literature bearing upon the problem, acknowledgments are made here and elsewhere.

The writer is indebted to Dr. Henry Suzzallo and Dr. Paul Monroe, both of Teachers College, for valuable assistance; to the former for suggestions concerning the general survey of the field, and to the latter for aid in connection with the historical part of the study. To Dr. George D. Strayer, of Teachers Col-

lege, under whose immediate supervision the study has been formulated, the author owes a debt of gratitude for kindly sympathy and generous assistance.

J. L. H.

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ADMISSION TO COLLEGE BY CERTIFICATE

CHAPTER I

INTRODUCTION

No student of educational administration will hesitate to admit that the system of "Admission to College by Certificate" has been, is, and will continue to be, an educational problem of the gravest practical importance. The task here undertaken will be to make an examination of the origin, development, and present status of the certificating system and to set forth such evaluations and conclusions as the data may seem to justify.

In the first place, it is proposed to show that admission to college by certificate did not have its origin in chance device, but that it was a natural and logical outgrowth of educational conditions; and that the conditions which called into existence the new system were the results of changes in the form of educational institutions. To understand the immediate conditions which gave rise to the problem, it is necessary to trace the rise and development of state universities and state free school systems.

The significance of the problem varies greatly with the viewpoint taken. Examined from the standpoint of any college wanting well-prepared students and not having in mind the welfare of the secondary school, the whole question presents different aspects from those seen by institutions wanting any kind of students and not caring for the welfare of the lower schools. The first class of colleges indicated is apt to look upon the system with misgivings; the latter class will view the plan with selfish favor. Another type of colleges accepts the graduates of the preparatory schools and makes the most of them, but disclaims any interest or responsibility in their previous training. Still another group of higher institutions looks upon the secondary schools as a part of its own system and does all in its power to assist the lower schools in their effort toward self-develop-

ment. It is believed that the last class of higher institutions has succeeded best with the plan of admission to college by certificate.

Along with the four attitudes of colleges toward the high schools mentioned, there may be as many dispositions manifested by the schools toward the colleges. Furthermore, different types of schools will vary in their dispositions toward any one class of colleges. The best private and public schools, desiring to build up strong local institutions, will look upon the high grade indifferent college with more respect than upon a low grade selfish college which accepts any kind of students on certificate. The best schools will largely disregard the indifferent college which accepts their graduates without criticism or suggestion, but will gladly cooperate with the high grade institutions which show a genuine interest in the development of all parts of the system. The inferior secondary schools will assume a patronizing, an indifferent, an antagonistic or a cooperative disposition determined largely by the attitude of the college with which they are dealing.

The views set forth by articles and addresses on the question of certification have been based upon one or more of the different standpoints held by the different types of colleges and secondary schools suggested. In this study the standpoints of mutually sympathetic and cooperative higher and lower efficient institutions will be held in view; for, it is believed that only under such conditions can admission to college by certificate ever become satisfactory.

The Problem

As long as the question of admission to college by certificate is looked upon merely as the formal transfer of individuals from one institution to another, and no more, just so long will the system be adjudged unsatisfactory. The adoption of the system means, usually, the transfer of responsibility for determining standards from the higher to the lower part of the system. The lower part, however willing it may be, is not prepared to bear the burden alone. The college cannot afford to shift the control of its own standards to high schools unless it is willing to assist the schools in maintaining those standards.

The problem of certification, in its final analysis, becomes a question of sane, sympathetic cooperation.

From the standpoints suggested, "Admission to College by Certificate" becomes a problem which may be stated as follows:

HOW MAY THE ADEQUATE PREPARATION AND TRANSFER OF A SELECT CLASS FROM ONE PART OF A DEMOCRATIC EDUCATIONAL SYSTEM TO A HIGHER PART BE BEST ACCOMPLISHED WHEN THE WELFARE AND INTEREST OF EVERY PHASE OF THE ENTIRE SYSTEM IS CONSIDERED? THE PROBLEM MAY BE RESOLVED INTO THE FOLLOWING FACTORS: (1) THE HIGHLY DEMOCRATIC, DIFFERENTIATED AND VARYING CONDITIONS AND DEMANDS OF THE LOWER PART OF THE SYSTEM; (2) THE RESPONSIBILITY OF PROTECTING THE STANDARDS OF THE SCHOOLS AND COLLEGES; AND (3) THE LEGITIMATE AND MUTUAL ASSISTANCE AND SUPPORT WHICH THE TWO PARTS OF THE SYSTEM SHOULD RENDER TO EACH OTHER.

Related Studies

Dr. E. C. Broome in his study of "College Admission Requirements"¹ gives some facts and draws certain conclusions concerning the "Accrediting System." He does not attempt to do more than raise some of the questions involved. His attitude toward the system, although some merits are admitted, is, on the whole, adverse. He concludes: "As a method for general adoption, however, the diploma system cannot be safely recommended. In the first place, there are too many weak colleges in the United States which will not turn away an applicant for admission under any considerations. Secondly, there is no homogeneity among our secondary schools. Thirdly, high-school teachers need be neither scholars nor college graduates, nor are they appointed with sufficient care."² The writer has no disposition to claim that the conditions as set forth do not exist. The betterment of these conditions constitutes our present and future work. Dr. Broome further states that when certain desirable changes are made, "then admission to college by diploma as a general policy will be both safe and desirable."³ His

¹ A Historical and Critical Discussion of College Admission Requirements, pp. 116-125.

² *Ibid.*, p. 124.

³ *Ibid.*, p. 125.

only suggestion for the realization of the desirable changes, however, is the provision of a national board of inspectors for secondary schools. The plan suggested would place over the schools external authority, or possibly insert, between the two parts of systems, factors which would tend to keep them asunder rather than draw them together by sympathetic ties.

Part V of the Fourth Annual Report of The Carnegie Foundation for the Advancement of Teaching deals with material bearing upon the problem under consideration. It is plainly the purpose of the Foundation, however, to set forth conditions rather than to propose detailed solutions of the problems suggested. Under the heading, "Articulation of High School and College," the following sentences occur: "The effort to shape our detached educational agencies into a system, the parts of which support and demand each other, and simultaneously to bring the whole into a more fruitful relation with the problems and strivings of contemporary life, has latterly resulted in the consciousness of maladjustment at various points. . . . But nowhere else is there just now such marked discomfort as at the junction between high school and college. The struggle to perfect articulation at that point is perhaps the most urgent of the problems in readjustment demanded by a comprehensive educational policy."⁴ One of the ideas here expressed, which has been kept in mind in the following study, is that the parts of the system should "support and demand each other."

No attempt is made in this introduction to summarize the articles which have been written concerning the theme of certification. Many of the utterances have been mere matters of opinion, others have been based upon conditions which no longer exist and do not seem sufficiently valuable to justify a review, while still others of real value will be referred to and accredited when used in the different parts of the study.

The most comprehensive bibliography of the literature bearing upon the question, published to date, was prepared by the late Dean Frederick W. Moore, of Vanderbilt University, and the writer, and appeared in the Proceedings of the Association of Colleges and Preparatory Schools of the Southern States,

⁴Fourth Ann. Rept. Carnegie Foundation for the Advancement of Teaching, p. 135.

for 1910, under the title, "The Administration of the Certifying System of Admission into College." The references and the syllabus were written by Dean Moore, while the exhibits and queries were prepared by the author of this study.

Sources and Material Used

After spending almost four years in examining the literature published in general educational works, periodicals, proceedings of various associations, and the few special studies bearing upon admission to college by certificate, the conclusion was reached that while some service might be rendered by organizing the material found in the different writings, a study based upon sources would be more valuable. Many of the articles and discussions published were based upon general observation and opinion, as already suggested, without the support of records, and hence the conclusions were little more than expressions of popular belief. In this study an attempt has been made to select sources, as far as possible, of unquestionable reliability. The effort was not, at all times, absolutely successful. Educational records for the entire United States had not been published previous to 1870. That year, the Bureau of Education published its first statistical report. Such records as were in existence previous to that time were only to be found in state reports. The first statistical report of the National Bureau was compiled in a most painstaking manner. Official reports were supplemented by private correspondence.

For the historical part of this study dealing with conditions previous to the introduction of certification, the catalogues of the institutions concerned and the National report of 1870 were used.

The discussion of the evolution of the system has been based upon the records of the Governing Boards, the Minutes of Faculties, and the contents of catalogues of nine state universities covering a period of forty years. To obtain these records the writer visited each of the institutions indicated, and copied from the records all material bearing upon the question. In the main the records were satisfactory; in some instances they were incomplete but not so much so as to interfere materially with the work.

While it is true that recorded intentions of Boards and Faculties are not always executed, they do indicate the crystallized plans of organizations and furnish some insight into their evolution. The best data for the historical part of the study seemed to be the records made by the institutions themselves rather than the writings of single individuals. This belief will explain further why the records of bodies are chosen rather than the general literature published on the question.

The data concerning present day conditions are taken from the catalogues and other publications of the institutions concerned. Their reliability is subject to the limitations incident to failure in execution, incomplete statement of actual conditions, and such errors as may occur in their interpretation. By the expression, present day conditions, is meant conditions prevailing in the United States during or at the close of the scholastic year, 1910-1911. Unless otherwise indicated, the catalogues and publications setting forth conditions for that year have been used.

No attempt has been made to cite page references to the minutes consulted for the reason that the minutes with few exceptions are unpublished; and should they be published in the future, the paging would undoubtedly be changed. All of the matter used, however, may be verified by date references and context. Much of the material has been compiled but the sources are evident and may be checked by those who may desire to do so. Since the catalogues for the scholastic year, 1910-1911, have been used, it has not been thought necessary to give page references to the catalogues.

Type Systems

When certain progress had been made in the investigation it became apparent that the practices by different institutions, in the different states and in different sections of the United States, could be classified under certain general types. It furthermore became evident that two fundamental factors could be used in making a type classification. These two factors comprise the methods used in selecting the accredited lists of schools and in school visitation or inspection. The list of schools may be

selected by a general board, as in New England; by a state board, as in Indiana; by the university faculty, or by combinations or modifications of these methods, as in the several states whose systems will be described. Likewise the authority for school visitation may be located with the State Department of Education, with the State University, with the State Board, with two of these, or personal visitation may be omitted entirely. These different types with their modifications will be examined and no attempt will be made to give descriptive details concerning institutions which have adopted types elsewhere explained.

Outside Aid to the System

It would be impossible to trace out all of the influences which have contributed to the development of any or all of the various types of systems. That public sentiment has grown in its favor, no one will deny. The schools and the colleges alike should be credited with whatever has been achieved. Various educational bodies such as local and national associations have also made their contributions. Many of these contributions have been in the lines of initiation and development of systems. Aside from the inspirational influences, certain movements have contributed in a material way, though indirectly, in aiding the development of the new system. The "Report of the Committee of Ten" gave assistance in the formulation of high school courses of study and helped to draw the line between college and preparatory work. The influences of the Carnegie Foundation for the Advancement of Teaching caused many institutions to raise their entrance requirements and that, at once, brought about a great agitation in the colleges and high schools. As a result, in many institutions admitting on certificate, improvements in methods were made. The General Education Board, by providing funds for the employment of inspectors of high schools in the southern states, greatly assisted in the articulation of the schools and colleges and improved the standards of admission by certificate. The influences of any one of the three movements named upon the certificating system would constitute a study in itself and no attempt will be made to give them a full evaluation in this work.

Divisions of the Study

It has seemed best to divide the study into four parts. The first of these will be given to an examination of educational conditions in the United States leading up to the origin of the certifying system; the second will deal with the development of the principles which have been woven into the different types of systems; in the third part, an effort will be made to set forth the different types of systems as they are in operation to-day; and the fourth division will be given to an evaluation of conditions with conclusions and suggestions with reference to the further improvement of the various systems now in use.

In the first part of the study it is disclosed that in early days preparatory schools and colleges were so supported, organized and conducted that admission to college by certificate was not and could not have been used to advantage. Later, when the states began to take control of education, the preparatory and collegiate work was done by one institution, but the lower and the higher parts of the work were not clearly differentiated and there was no need of a formal transfer from one part of the system to the other, and hence there was no demand for a certifying system. When the states began to develop free public high schools it seemed best to separate the preparatory from the collegiate work. Since the states were paying for the support of both the higher and lower institutions the idea of uniting them into two mutually cooperative parts of one system called for some link to bind them together. To meet this need the certifying system was originated.

The second part of the study traces, through the minutes of nine state universities, the steps taken in the evolution of different types of systems. The purpose of this chapter is to provide a background for the better understanding and interpretation of present day conditions. There is no reason why the experiences of the different states should not become the guiding principles of all. This can best happen when the regressive as well as the progressive movements are set forth in detail. With this service in view, an attempt has been made to search out the introduction of new phases in the various systems and trace them in their development through a period of forty years.

Chapter IV is given to a description of different systems used in the United States at the present time. The practices in the different states are discussed under certain types. An analysis of the different types is made with reference to selection of accredited lists, control and direction of school visitation, methods used in testing schools, regulations for the admission of students, treatment of students and schools failing to meet required standards, and means used in bringing about cooperation between high school teachers and college instructors.

In the last chapter an effort is made to evaluate certain factors in the different systems with a view to formulating some conclusions with reference to the results now obtained. The weaknesses as well as the advantages of the various systems are discussed, and, finally, suitable types are suggested for adaptation to different states and to the United States.

CHAPTER II

EDUCATIONAL CONDITIONS IN THE UNITED STATES ABOUT 1870

Educational movements and educational institutions evolve from social, political, religious, and economic conditions. To understand conditions their causes must be studied. It is important not only to set forth and analyze the conditions which led to a new method of admission to college, but the causes back of them also challenge investigation and interpretation.

The historical part of this study has been divided into two divisions since the conditions which preceded the movement under consideration were far different from those which gave rise to it and accompanied its later development.

On September 20, 1870, Dr. Henry S. Frieze, Acting President of the University of Michigan, in his annual report¹ of that year, suggested mutual cooperation between the University and the high schools of the State, the visitation and examination of the schools by members of the Faculty, and the admission of students to the University by certificate. This date, so far as has been ascertained, marked the formal inception of a movement, in the United States, destined to become a nation-wide factor in educational administration.

Whether President Frieze accidentally stumbled upon a popular device for admitting students to college or whether, as a sagacious man, he merely voiced an imperative demand of new conditions, can be answered only by a careful study of the situation which called forth his suggestions.

Before taking up the more critical part of this chapter, it may be advantageous to enumerate some of the more prominent of the educational movements closely connected with the period under consideration. In 1867, in response to a memorial² from a convention of school superintendents, Congress provided for

¹ Ann. Rept. Bd. Reg., 1869-1870; Cat. 1870-71, pp. 62, 63.

² U. S. Com. Rept., 1870-71, Vol. 2, p. 5.

the organization of a National Department of Education. Later this Department was changed to a Bureau and placed in the Department of Interior. In 1870, the first statistical report concerning education in the United States was published. That report has been of great service in this study. The Congressional land grant act of July 2, 1862, providing for a system of Agricultural and Mechanical Colleges, became a great factor in the organization of state school systems. A general revival of learning, following the Civil War and "reconstruction," was plainly visible in the organization of free public schools all over the United States. It was in this period that state universities showed, by original foundation, reorganization, or expansion, the most unmistakable marks of a new educational regime. As one of the significant signs of the new educational revival, on the professional side, it may be noted that the National Teachers Association, which had had a more or less precarious existence since 1857, was reorganized and rechristened the National Educational Association, and held its first regular meeting at St. Louis in 1871.

Not only in the United States but in Europe as well do we find conspicuous educational happenings falling within this period. In regard to movements in England we quote the following from Graham Balfour: "At last in 1870, in the first Ministry of Mr. Gladstone, a Government Bill for England and Wales was introduced by the Rt. Hon. W. E. Forster, and after numerous modifications was passed by both Houses of Parliament. Although considerable additions have been made, only five or six sections of the 'Elementary Education Act,' of 1870, were repealed before 1902, and it remains the basis of English public elementary education today."³ Three fundamental principles underlying public education were first incorporated in English school law in this act: "A compulsory local rate (tax), a representative local authority and the compulsory attendance of children at school."⁴ Previous to this foundation of Government schools, no school failing to provide for the reading of the Bible each day could secure aid from the Government. Under the new law, "a purely secular school might earn the

³The Educational Systems of Great Britain and Ireland, p. 18.

⁴*Ibid.*, p. 21.

grant without any question.”⁵ School Boards might also, under certain conditions, provide for industrial schools.⁶ In this same year, “a Royal Commission on Scientific Instruction was appointed, with the Seventh Duke of Devonshire as Chairman.”⁷ England had been working toward popular education for years but the Act of 1870 marked the first general crystallization of public educational sentiment into law.

It is germane at this point to read the following from Frederick Paulsen: “The prominent feature of the last period, beginning about 1870, was the long struggle of this new secondary school for the admittance of its pupils to the university, ending with its victory in 1901, when it was officially acknowledged as essentially equal in rank to the classical Gymnasium. In 1870 those who had passed the Leaving Examination at a Real schule I Ordnung (real school of the first order) were for the first time given access to the university, although only to the philosophical faculty, or rather only to one or two of its departments, i.e., to mathematics and natural sciences, and to modern languages.”⁸

The type of school indicated in this quotation corresponds somewhat to the modern American high school. The effort to connect it with the Universities was not unlike the movement in the United States under consideration.

In order to make the historical part of this study more intelligible, from the beginning, the following fundamental theses are announced in general outline:

1. Admission to college by certificate presumes two separate educational systems; or, two separate and well-defined parts of one and the same system.
2. One of the two systems, or one of the two parts of the same system, is higher than the other; and the higher system, or part, rests upon the lower as a basis.
3. It is claimed that in the earlier days of the American colleges there were two separate and distinct systems, that these two systems were entirely independent of each other, and hence there was no system of admission from one to the other by certificate.

⁵ The Educational Systems of Great Britain and Ireland, p. 22.

⁶ *Ibid.*, p. 58.

⁷ *Ibid.*, p. 56.

⁸ German Education, Past and Present, Tr. by Lorentz, p. 215.

4. Later, the two parts were united into one system and appeared together in the same institution; but the two parts of the institution, the lower and the higher, were so blended together that no formal transfer from one to the other was found necessary.

5. When state universities and state free school systems were first established, they tended to function, for some time, as two separate and unrelated systems.

6. The history of the evolution of the system of admission to college by certificate is also the history of an effort to unite two separate state systems into two closely related and mutually co-operative parts of one system.

With the above mentioned general propositions in mind the reader is directed to a more critical examination of the conditions of secondary schools and colleges in the United States leading up to the pivotal period including the year 1870.

TABLE I¹
DATA CONCERNING ALL STATE OR TERRITORIAL UNIVERSITIES
FOUNDED AND PARTIALLY OR FULLY ORGANIZED BY 1870

Nos.	States	Dates of Federal Endow- ments	Dates of Legislative Enact- ments	Dates of Board Organiza- tions	Dates of Openings
<i>Northeastern Division</i>					
1	Maine.....	1862	1865	....	....
2	Vermont.....	1862	1791	?	?
<i>Southern Division</i>					
3	Alabama.....	1819	1820	1822	1831
4	Florida.....	{ 1845 }	1869	....	....
5	Georgia.....	{ 1862 }	1785	1801	1801
6	Kentucky.....	{ 1862 }	1865	....	....
7	Louisiana.....	{ 1806 }	1853	?	1860
8	Mississippi.....	{ 1811 }	1844	1845	1848
9	North Carolina..	{ 1827 }	1789	?	1795
10	South Carolina..	1862	1801	?	1805
11	Tennessee.....	....	1807	?	1820
12	Virginia.....	{ Before }	1819	1819	1825
13	West Virginia...	{ 1807 }	1867	1867	1867
		{ 1862 }			
<i>Middle West Division</i>					
14	Indiana.....	{ 1804 }	1820	1820	1824
15	Illinois.....	{ 1816 }	1867	1867	1868
16	Iowa.....	1862	1847	1847	1855
17	Kansas.....	1840	1864	1865	1866
18	Minnesota.....	1861	1851	1851	1851
19	Missouri.....	{ 1851 }	1839	1839	1841
20	Michigan ²	{ 1862 }	1837	1837	1841
21	Nebraska.....	{ 1804 }	1869	....	....
22	Ohio.....	{ 1826 }	1870	....	....
23	Wisconsin.....	1862	1848	1849	1849
		1839			
<i>Rocky Mountain Division</i>					
24	Utah.....	....	1850	1850	1867
<i>Pacific Slope Division</i>					
25	California.....	{ 1853 }	1866	1866	1869
26	Washington.....	{ 1862 }	1855	1861	1862
		1854			

¹The data given in Table I were compiled from the historical sketches found in the annual catalogues of the institutions concerned, for the scholastic year 1910-1911, unless otherwise accredited.

²The data concerning the University of Michigan are taken from Farrand's "History of the University of Michigan."

SUPPLEMENT TO TABLE I

Northeastern Division

1. Maine: 1870, University not open.
2. Vermont: 1865, "State Agricultural College" incorporated with the University of Vermont. (Cat., 1910-11, p. 10)

Southern Division

3. Alabama: 1865, University buildings burned by Federal Cavalry. (Cat., 1910-11, p. 12)
1868, University opened with 30 students. (U. S. Com. Rept., 1870-71, Vol. 2, p. 82)
1869, Collegiate instruction resumed. (Cat., 1910-11, p. 12)
4. Florida: 1852, "East Florida Seminary" established. (Cat., 1910-11, p. 16)
1867, "East Florida Seminary," destined to become part of University of Florida, moved to Gainesville. (U. S. Com. Rept., 1870-71, Vol. 2, p. 106)
1868, Constitution adopted this year provided: "The Legislature shall provide a uniform system of common schools and a University." (Cat., 1910-11, p. 16)
1869, East Florida University had 75 students. (U. S. Com. Rept., 1870-71, Vol. 2, p. 106)
1870, No institution at this time known as State university.
5. Georgia: 1870, Fixed curriculum, no sciences until after this date; soon after, reorganization and expansion of work as result of Land Grant Act of 1862. (Cat., 1910-11, pp. 4, 5)
6. Kentucky: 1865, Funds from Land Grant, of 1862, used to found "one of the colleges of Kentucky University" now "Transylvania University";
1870, No State University, so called, at this time. (Cat., 1910-11, p. 9)
7. Louisiana: 1860, "Louisiana State Seminary of Learning and Military Academy" opened;
1863, Seminary closed;
1865, Seminary reopened;
1869, Buildings burned;
1870, Exercises resumed at Baton Rouge. (Cat., 1911, p. 22)
8. Mississippi: 1861, Only four students applied for admission;
1861-1865, University suspended. (Cat., 1910-11, p. 20)
1868-1869, Number of students, 214. (U. S. Com. Rept., 1870-71, p. 201)
9. North Carolina: 1868-69, A president, 5 professors and 41 students. (U. S. Com. Rept., 1870-71, Vol. 2, p. 250)
10. South Carolina: 1862-1865, Buildings used for Confederate hospital;
1865, Charter of "South Carolina College" changed;
1866, "South Carolina College" reopened as "University of South Carolina." (Cat., 1910-11, p. 4)

11. Tennessee: 1869, Agricultural and Mechanical College established as a department of "East Tennessee University." "Thus the scope of the institution was greatly widened, making it now possible, for the first time in its history, to begin the building of a true University." (Cat., 1910-11, p. 7)
12. Virginia: 1861-65, "Life at the University during the years from 1861 to 1865 was not unlike that throughout the South in the matter of privation and self-denial, borne without complaining." (The University of Virginia.—Patten, p. 214)
- 1870, Number of professors, 15; Number of students, 464. (U. S. Com. Rept., 1870-71, Vol. 2, p. 515)
13. West Virginia: 1870, First building completed. "For many years the growth of the new institution was very slow and uncertain." (Cat., 1910-11, p. 24)

Middle West Division

14. Indiana: 1820, "State Seminary" founded;
1828, "State Seminary" became "Indiana College";
1838, "Indiana College" became "Indiana University";
1867, First State appropriation, \$8000, for support of Indiana University. (Cat., 1911, pp. 37, 39, 41, 46)
15. Illinois: 1868, Seventy-seven students enrolled;
1870, Women admitted; "First shop instruction given in any American University." (Cat., 1910-11, p. 58)
16. Iowa: 1860, University reorganized; only normal department in operation from 1858 to 1860;
1868, Law Department established;
1870, Medical Department established. (Cat., 1910-11, p. 35)
17. Kansas: 1866, Only preparatory department. (Cat., 1910-11, p. 35)
- 1869, Number of students enrolled, 143; 16 in college and 127 in preparatory work. (U. S. Com. Rept., 1870-71, Vol. 2, p. 182)
18. Minnesota: 1851, Only "preparatory school" opened;
1857-1866, debt troubles;
1867, "preparatory department" opened;
1869, "small company of preparatory students ready for college instruction." (General Information, 1910-11, pp. 37, 38)
19. Missouri: 1867, First State Aid. (Bul. of University, May, 1909)
- 1867-1868, Number of students, 217. (U. S. Com. Rept., 1870-71, Vol. 2, p. 204)
- 1868, Normal department opened;
1869, Women admitted;
1870, School of Agriculture and School of Mines organized. (Cat., 1910-11, p. 20)

20. Michigan:¹
- 1837, First "preparatory branch" opened. (p. 28)
 - 1838, Four additional "branches" opened. (p. 28)
 - 1848, All aid withdrawn from "preparatory branches." (p. 28)
 - 1851-52, Fifty-seven students attended the Literary Department; the number had been decreasing for four years. "The decrease... was attributed (in part) to lack of preparatory schools, since the University had withdrawn its assistance from the branch schools... several of them had been closed. But few towns in the State were able to support more than their primary schools." (p. 70)
 - 1850, School of Medicine opened. (p. 87)
 - 1852-1853, Sixty students in Literary Department. (p. 138)
 - 1859, Law School opened. (p. 136)
 - 1860, "The announcement in regard to the scientific course was elaborated." (p. 100)
 - 1863-1864, "There were 856 students in all departments." (p. 175)
 - 1866-1867, "There were 1255" students. Immediately after the close of the Civil War the number of students in the University was greatly increased. (pp. 172, 173)
 - 1868-1869, Many changes were made in courses, in requirements and in additions to the work of the University. (pp. 173-177)
 - 1869, "Appropriation, for the aid of the University, of \$15,000, for the year, and for each year thereafter.... More important than all else was the practical recognition by the legislature of the principle of state aid for the University." (pp. 187, 188)
21. Nebraska:
- 1870, University not open.
22. Ohio:
- 1870, University not open.
23. Wisconsin:
- 1849, Only preparatory department;
 - 1854, First graduates, two in number;
 - 1858, Preparatory department criticised and limited in scope; University reorganized;
 - 1859, Henry Barnard became President of the University. "His policy centered in elevating the public school system of the State as a basis for university growth, but ill health caused his resignation in 1860";
 - 1864, "No commencement was held, all but one of the senior class having joined the army";
 - 1866, Reorganization effected. "The close of the war brought a new inspiration and growth to the University";
 - 1870, "The University had nearly 500 students." (Cat., 1910-11, pp. 47, 48, 50, 51)

Rocky Mountain Division

24. Utah:
- 1851, "University of Deseret" closed after being open one year;

¹ All page references in this table concerning the University of Michigan are to Farrant's "History of the University of Michigan."

1867, "University of Deseret" reopened;
 1869, University more fully organized. (Cat., 1910-
 11, p. 7)

Pacific Slope Division

25. California: 1852, "Contra Costa Academy" founded;
 1855, "Contra Costa Academy, later changed to
 College School," incorporated as "College
 of California";
 1869, "College of California" opened as "Univer-
 sity of California." (Cat., 1909-10, pp.
 33, 35)
26. Washington: 1870, No graduates until six years later; "For
 several years the work of the University did
 not rank much above that of an academy."
 (Cat., 1909-10, p. 36)

Observations Based on Table I and Its Supplement

Of the twenty-six state and territorial universities founded before 1870, in seven cases only did the initiative of state legislatures precede appropriations by the Federal Government. In the case of South Dakota, the legislature merely located a university and then petitioned Congress to appropriate lands for its endowment. This Congress failed to do until 1881, and until after that date South Dakota's University existed in name only; and, for that reason, South Dakota is not included in the table. The University of North Carolina, the second state university founded in the United States, has never received aid from the Government. The University of Vermont was founded upon state grants but received Federal aid at a later date. South Carolina, Virginia, and Missouri, in the order named, founded their universities upon their own resources. Utah, whose inclusion in the table may be properly questioned, two and one-half years after her settlement organized a university, destined later to become the State University; but lack of students and financial support closed its doors. This institution, sixteen years later, was again opened without help from the General Government. The first state university chartered by a legislature was the University of Georgia. When that institution was opened in 1801, it possessed "an unproductive and, for the most part, uninhabitable tract of land."⁹

The authorities consulted do not give the sources of the grant. Since no Federal grants are reported by other states until nineteen years after the University of Georgia was chartered it

⁹ Cat., 1910-11, p. 4.

seems probable that this land was given by the State. With the exception of the seven institutions named and discussed the others, nineteen in all, clearly owed their origin, directly or indirectly, to Federal aid.

The part performed by the General Government in the foundation of state universities, previous to 1870, may be seen best by comparing the dates in column one with those in column two, of the table. In fifteen of the nineteen cases of Federal endowment the acts of the legislatures follow so closely after the endowments that little room is left to doubt the causes of the legislative steps. Sometimes a second endowment seemed necessary to move certain states. This appears to have been true in the cases of Florida, Louisiana, Indiana, Michigan, and California.

It may be observed that the grants fall into three classes. From 1804 to 1807 a group of four institutions received grants. From 1807 to 1862 the endowments were made at random or when states were admitted into the Union. In 1862, the most effective stroke of the Government was made in a provision for agricultural and mechanical colleges.

Table I shows that exactly one-half of the institutions named were either originally organized as a result of the Morrill land grant act or revised their former organizations as a result of it. These were the universities of Maine, Vermont, Florida, Georgia, Kentucky, Tennessee, West Virginia, Illinois, Minnesota, Missouri, Nebraska, Ohio, and California. Because of the war, the actions of state legislatures were often delayed and the practical results of the Land Grant Act of 1862 are seen only in prophetic plans and changes in organization. Five of the institutions on the list, Maine, Florida, Kentucky, Nebraska, and Ohio, were not yet open as state universities in 1870; and three others, West Virginia, Illinois and California were opened in 1867, 1868 and 1869, respectively. The changes made in five other cases came between the close of the war and 1870. Vermont combined the new agricultural college with her old university in 1865; Georgia revised an old fixed curriculum by incorporating the new subjects called for by the conditions of the grant; Tennessee grafted the new branches into an old institution, founded thirty-nine years before, which was destined to become her state university some years later; Minnesota re-

ceived the aid in time to enable her to incorporate the Agricultural and Mechanical College into her state university, which was just changing from a preparatory school to a college; the expansion of the University of Missouri into a flourishing institution, in 1868, 1869, and 1870, may be traced in part to the Act of 1862. Here then are thirteen of the twenty-six institutions composing Table I feeling the impulse of the Government within a period of five years.

No attempt will be made to set forth the changes in curricula directly traceable to this act. The Federal Government without attempting to destroy the old classical curriculum called upon the states to include other subjects in their teaching. More than that the Government proposed to pay for the teaching. The influence of this step on the part of the General Government was a most powerful factor in the organization of educational institutions about 1870 and thereafter.

A significant point is brought out by this table in the matter of general divisions of the states of the Union with reference to the foundation and organization of state universities. Agricultural and mechanical colleges are not included in this study for the reason that they have not been material factors in the development of the system of certification. The Northeastern division of states, comprising the New England and the Middle states, possessed but two state universities, in 1870,—those of Vermont and Maine. Eleven of the twenty-six institutions named in Table I are in the Southern states. Two of these, Florida and Kentucky, were not yet organized as separate state universities. While the Southern state universities were, as a class, the first to be founded, some were slow in opening their doors to students. Indeed, many of them led precarious lives until they were closed by the Civil War. The Pacific division had two universities, but that of Washington was little more than a preparatory school, while the University of California was just opening. The only institution found in the Rocky Mountain division was that of Utah, which was not yet a state university, but is included in the table for the reason that it was destined to be the state university of Utah at a later date, and in 1870 was serving as a territorial institution. The Middle West was far in the lead at the close of the period under ex-

amination. Michigan and Missouri opened in 1841, Wisconsin in 1849, Minnesota in 1851, Iowa in 1855, Indiana at an earlier date and Illinois somewhat later. These institutions represented the most vigorous type of state universities found in the United States at the close of this period. But while these twenty-six institutions have been classed as universities, the question arises as to whether their strength as colleges and universities was not more apparent than real. A further study of their conditions will be made in the following table.

TABLE II¹
INSTRUCTORS AND STUDENTS IN STATE UNIVERSITIES, NAMED IN
TABLE I, IN 1870

Nos.	States	Number of Instructors	Number of Students				Per Cent Prep. Students
			Pre- para- tory	Aca- demic	Others	Totals	
1	Maine ²						
2	Vermont	16				114	
3	Alabama	?				30	
4	Florida ³	?	40		50	90	
5	Georgia	10				76	
6	Kentucky ⁴	9				283	
7	Louisiana	18				179	
8	Mississippi	9				231	
9	North Carolina	6	38	17		55	69
10	South Carolina	17				65	
11	Tennessee ⁵	5				121	
12	Virginia	15				464	
13	West Virginia	10	140	11		151	92
14	Indiana	15	35	284		319	11
15	Illinois	12				75	
16	Iowa ⁶	18	40	147	116	303	21
17	Kansas	7	128	0		128	100
18	Minnesota ⁷	10				299	
19	Missouri	9	86	126		212	40
20	Michigan ⁸	33	0	332	130	462	0
21	Nebraska ²						
22	Ohio ²						
23	Wisconsin ⁹	21	193	152	150	495	55
24	Utah ¹⁰	14				546	
25	California	6				50	
26	Washington	{	"70			"70	
			or			or	
			80"			80"	

¹ This table was compiled from U. S. Com. Rept., 1870-71, Vol. 2, pp. 81-354 and 506-520.

² University not open in 1870.

³ No University of Florida, so called, at this time. See supplement to Table I and references concerning "East Florida Seminary."

⁴ See supplement to Table I and references concerning "Kentucky University."

⁵ See supplement to Table I and references concerning "East Tennessee University."

⁶ 116 women not distributed in departments, hence are not counted in percentage of preparatory students.

⁷ See supplement to Table I and references concerning "University of Minnesota."

⁸ Only "academic" and "scientific" students included.

⁹ 150 women not distributed in departments, hence are not counted in percentage of preparatory students.

¹⁰ See supplement to Table I and references concerning "University of Deseret."

Observations Based on Table II

Table II, though fragmentary, when analyzed in connection with Table I and its Supplement divulges facts, important in

this study. The accessible sources do not reveal every time the exact dates of the reports upon which the table is based; but it is certain that in all cases the reports were for years preceding, by one or two, or including the scholastic year 1869-1870.

It may be noted that in the entire Northeastern division, comprising ten states in all, only 114 students were in state universities. In the Southern states, 1745 students were enrolled in eleven institutions entirely or partly under state control. Eight state universities in the Middle West were instructing 2293 students, while the states and territories of the Rocky Mountains and Pacific Slope had about 670 students in three institutions. A grand total of 4822 students, or 87 per cent of the number of students enrolled in the University of Wisconsin for the scholastic year, 1910-1911, were enrolled in twenty-three state universities about 1869-1870.

The especial object for which Table II has been arranged is to set forth as nearly as possible the relative numbers of students in the preparatory and academic departments of the institutions named. The first question may very properly be, how many of these twenty-three universities did preparatory work or supported preparatory departments? The answer to this question is not found in Table II alone, but when taken in conjunction with Table I and its Supplement the answer becomes obtainable. Ten universities answer for themselves by giving definite figures. All but one of these institutions report preparatory students. In the nine universities reporting, 49 per cent of all students were doing preparatory work. This computation does not include 266 women reported in two institutions but not distributed in departments; nor are the 462 students, reported by the University of Michigan in the academic department, included. What about preparatory work in the remaining thirteen institutions not distributing students in their reports? The 299 students reported by the University of Minnesota were nearly all preparatory students if we take for face value the statement cited in the Supplement to Table I concerning that institution. Since the "University of Deseret," later the University of Utah, opened in 1867, it would seem that a very large part of the 546 students reported must have been doing preparatory

work at the time of the report. For the rank of the newly organized University of California, opinion must be based upon the following statement taken from the United States Commissioner's Report, already cited, page 91: "About fifty students have entered to date, distributed among the various colleges, most of them, however, in the College of Letters." Since only two of the eleven Southern universities give the numbers of their academic and preparatory students, it is necessary to judge of the nature of their work from somewhat general facts. North Carolina reported 69 per cent of her 55 students in the preparatory department, while West Virginia reported 92 per cent of her 151 students in preparatory training. Without repeating details given and cited in the Supplement to Table I, it may be confidently asserted that, since all of the Southern state universities were practically or completely closed during the War, that reconstruction delayed their reopening, that most of them were merely in the course of reorganization at the time of their reports, it seems probable that many of the 1745 students reported were doing preparatory work. The presence of agricultural and normal departments in at least four of these eleven institutions may be adduced as evidence regarding the presence of preparatory students.

The question, then, as to the number of state universities doing preparatory work or supporting preparatory departments may be answered by stating that with the exception of Vermont, concerning which institution we have no data, and with the certain exception of Michigan, the remaining twenty-one certainly did more or less preliminary work. While the University of Michigan had made far more progress than any other state university in making a complete demarkation between preparatory and collegiate students, in 1870, the statement encountered in the catalogue for the year, 1870-1871, recommending that candidates take one year of Freshman work before applying for regular entrance to the Freshman class remains suggestive. As to the exact numbers of students in the twenty-three institutions doing secondary work no definite answer can be given; it seems highly probable, however, considering the available evidence that at least 50 per cent of all students were doing what would be classed as preparatory work, today.

TABLE III¹INSTRUCTORS AND STUDENTS IN OTHER THAN STATE UNIVERSITIES
IN STATES, NAMED IN TABLES I AND II, IN 1870

No.	States	No. of In- stitu- tions	No. Re- port- ing	No. of In- struc- tors	No. of Stu- dents	Re- port- ing Ac. and Prep. Stu- dents	No. of In- struc- tors	No. of Students			Per cent of Prep. Stu- dents
								Prep.	Ac.	Totals	
1	Maine....	4	4	40	832	4	40	475	357	832	57
2	Vermont..	2	1	7	65						
3	Alabama..	3	2	26	396	1	5	148	36	184	80
4	Florida...	1	1	6	148	1	6	99	49	148	66
5	Georgia...	6	5	43	720	3	24	94	395	489	19
6	Kentucky..	9	7	62	1471	3	22	111	241	352	31
7	Louisiana..	6	4	17	425						
8	Miss....	1	1	5	101	1	5	81	20	101	80
9	N. Car....	9	9	49	894	2	12	26	300	326	8
10	S. Car....	4	4	23	333	1	6	62	19	81	76
11	Tennessee..	16	13	78	1810	6	53	483	645	1128	42
12	Virginia...	9	9	89	1618	1	6	96	69	165	58
13	West Va...	1	1	9	94						
14	Indiana...	17	16	144	3316	4	39	452	545	997	45
15	Illinois...	27	24	224	4472	14	154	1579	1342	2921	53
16	Iowa.....	12	9	72	1608	4	39	660	260	929	72
17	Kansas....	6	4	17	338	4	17	258	80	338	76
18	Minnesota..	1	1	4	43	1	4	40	3	43	93
19	Missouri...	13	11	129	1827						
20	Michigan...	6	5	44	938	2	16	263	99	362	72
21	Nebraska...										
22	Ohio.....	34	31	272	5566	17	156	1619	1488	3107	52
23	Wisconsin...	13	11	81	2088	10	77	1546	437	1983	77
24	Utah.....	0									
25	California..	14	11	113	1831	4	38	351	164	515	68
26	Wash.....	0									
	Totals...	214	184	1554	30943	83	719	8452	6549	15001	56

¹ The data found in Table III were compiled from the U. S. Com. Rept., 1870-1871 Vol. 2, pp. 81 to 354 and 506 to 529.*Observations Based on Table III*

That state universities, with a single exception, were largely doing their own preparatory work, in 1870, as has been shown by Tables I and II, does not settle the question of student supply for independent and denominational colleges existing in the twenty-six states named. For the purpose of studying this question, Table III has been compiled.

While the data used are incomplete, yet, when they are carefully analyzed, they become valuable. Should their incompleteness provoke criticism, the only reply that can be made is that they are the most reliable statistics available; especially is this true with regard to the more undeveloped states. A newly organized National Bureau of Education desiring to make the

completest report possible of educational conditions in the United States made a most strenuous effort, using both official and private channels, to obtain the most reliable statistics. Table III has been compiled from the statistics thus collected.

The numbers of institutions given for the several states most probably include all of the colleges at all worthy of the name. The thirty institutions counted as in existence, but making no reports, were doubtless, with exceedingly few exceptions, very small and undeveloped. The fact that only eighty-two of the one hundred eighty-four institutions reporting made no distribution of students into preparatory and academic departments leaves much to be desired. But since the eighty-two institutions making the distributions, or 44 per cent of all those reporting, had 45 per cent of all instructors and 47 per cent of all students reporting, a fair basis for conclusions is furnished. Furthermore, a careful study of related facts, given in the Commissioner's Report, leads to the belief that of those institutions not distributing students in their reports, practically all, if not all, maintained preparatory classes or preparatory departments. The Roman Catholic institutions, of which eighteen reported 252 instructors and 3545 students, did not distribute students in a single case. It is more than probable that all of those institutions did more or less preparatory work. The large number of colleges reporting fewer than 100 students and not distributing them support the presumption that they were little more than preparatory schools. The two largest colleges in Virginia, next to the University, Washington, with 20 instructors and 410 students, and the Virginia Military Institute, with 23 instructors and 376 students, are both known to have done some preparatory work in 1870. Neither of these institutions made distributions in their reports. Indeed, the only two colleges, of the 184 reporting, which do not seem to have been doing any preparatory work when the reports were made, were "Davidson College," of North Carolina, and "Mercer College," of Georgia. The former reported 6 instructors and 120 students; the latter, 5 instructors and 82 students. Both institutions distribute their students into Freshman, Sophomore, Junior and Senior classes and do not report any in preparatory work.

The conclusions which may be reasonably drawn from Table

III are (1) that a goodly number of the institutions reporting as colleges were, in fact, little more than elementary and preparatory schools; (2) that there is strong evidence that all but two of these 184 institutions were doing some preparatory work or supporting preparatory departments; and (3) that more than 50 per cent of all students reported were partly or fully below college rank.

TABLE IV¹

INSTRUCTORS AND STUDENTS IN COLLEGES OF STATES NOT HAVING
STATE UNIVERSITIES IN 1870

No.	States	No. of In- stitu- tions	Inst. Re- port- ing	No. of In- struc- tors	No. of Stu- dents	Inst. Re- port- ing Ac. and Prep. Stu- dents	No. of In- struc- tors	No. of Students			Per cent Prep. Stu- dents
								Prep.	Ac.	Totals	
1	N. Hamp.	1	1	27	382	1	27	0	382	382	0
2	Mass.	6	6	142	1350	6	142	0	1350	1350	0
3	Rhode Is.	1	1	14	217	1	14	0	217	217	0
4	Conn.	3	3	93	889	3	93	0	889	889	0
5	New York	27	24	448	7034	12	268	2893	1662	4555	63
6	New Jer...	6	5	70	864	2	37	0	479	479	0
7	Penna....	34	28	316	5312	12	141	1116	1427	2543	43
8	Delaware.	2	1	8	189						
9	Maryland.	10	9	123	1061	1	12	94	87	181	51
10	Dist. of C.	4	4	70	1215	1	18	112	139	251	44
11	Arkansas.	1	1	5	80						
12	Texas....	4	3	21	401						
13	Oregon...	4	3	13	476	1	5	108	15	123	87
	Totals..	103	89	1350	19470	40	757	4323	6647	10970	39

¹ The statistics found in Table IV were compiled from U. S. Com. Rept., 1870-71, Vol. 2, pp. 81-354 and 506-529.

Observations Based on Table IV

Tables II and III were prepared to show certain facts concerning the ranks and distributions of students in the states having state universities in 1870; Table IV has been compiled to ascertain the same series of facts concerning the states not having state universities. The Territories of Arizona, New Mexico, Colorado, Nevada, Wyoming, Idaho, Montana, Dakota, and the Indian Territory are not included in any of these three tables for the reason that not one of them reported a college or higher institution of learning before the date upon which these tables are based.

The table shows that, outside New England and the Middle States, higher education made a feeble showing in states not

having state universities. In the states of New Hampshire, Massachusetts, Rhode Island, Connecticut, and New Jersey, collegiate and preparatory students were not reported in the same institutions. This condition stands out in singular contrast with conditions elsewhere. Until this point is reached, with three exceptions, no need for admission to college by certificate has appeared. The question at once arises, why was admission to college by certificate not taken up in these states before it was in states having state universities? Some reasons will be offered after certain other facts are presented.

TABLE V¹
COLLEGES REPORTING ONLY ACADEMIC STUDENTS, IN ALL
STATES, IN 1870

No.	Name	State	Denom.	No. of In-structors	No. of Fresh-men	No. of Sophs.	No. of Jun-iors	No. of Sen-iors	Sci. Dept.	Total No. Stu-dents
1	Yale College....	Conn.	Cong.	68	143	132	140	104	125	644
2	Wesleyan U....	"	M. E.	10	51	33	31	38		153
3	Trinity College..	"	P. E.	15	22	28	21	21		92
4	Mercer U.....	Ga.	Bapt.	5	14	24	24	20		82
5	Bowdoin College.	Me.	Cong.	14	46	30	21	30	10	137
6	Colby U.....	"	Bapt.	6	17	13	15	7		52
7	Bates College....	"	F. W. B.	12	26	28	16	8		78
8	Williams College.	Mass.	Cong.	11	35	45	44	37		161
9	Tufts College....	"	Univ.	15	14	15	17	8	8	62
10	Amherst College.	"	Cong.	19	72	75	48	65		260
11	Harvard College.	"	"	75	193	140	123	158	41	655
12	Dartmouth C....	N. H.	Cong.	27	62	85	66	72	77	382
13	College of N. J..	N. J.	Pres.	24	62	94	86	86		328
14	Rutgers College.	"	Ref.	13	38	24	22	21	46	151
15	St. Lawrence U..	N. Y.	Univ.	9	11	14	6	10	6	47
16	Hamilton College	"	Pres.	11	38	46	35	41		160
17	U. of Rochester.	"	Bapt.	10	28	25	32	23	6	114
18	Union College....	"	Pres.	16	22	25	26	20	12	114
19	Genesee College.	"	M. E.	4	19	14	12	11		56
20	Columbia College	"	P. E.	14	36	24	31	31		122
21	Hobart College..	"	P. E.	14	22	15	18	12		67
22	Davidson College	N. C.	Pres.	6	28	33	39	13	12	125
23	Lafayette College	Pa.	Pres.	23	62	45	48	21	4	180
24	U. of Pa.....	"	"	26	33	48	27	16	32	156
25	Brown U.....	R. I.	Bapt.	14	31	55	53	78		217
26	U. of Mich.....	Mich.	State	33	112	81	65	74	130	402
Totals.....				494	1257	1191	1066	1034	509	5957

¹ References same as for Table IV.

Observations Based on Table V

Table V represents a set of conditions entirely different from those back of colleges and universities outside the New England and Middle Atlantic States. The 26 institutions named in this table reported none but *bona fide* college students. Their students were prepared for college work outside the institutions

they were attending, and were admitted by some form of entrance examination.

The first general factor to be noted is that with the exception of the University of Pennsylvania and the University of Michigan, all of these colleges owed their original foundations or acknowledged their allegiance to churches. Five of these colleges were Congregationalist; five, Presbyterian; four, Baptist; three, Protestant Episcopal; two, Methodist Episcopal; two, Universalist; and the Dutch Reformed and Free Will Baptist churches each controlled one school. Church influences radiating from other centers doubtless explain the existence of "Davidson College," in North Carolina, and "Mercer College," in Georgia. It may be recalled that these two small colleges appeared as seeming stragglers in Table III. Other facts of importance in this study are that all of these colleges, with the exception of the University of Michigan, are close to the Atlantic Coast; eleven are in New England. Many of them were transferred or copied from England, and brought their traditions with them. Their curricula were classical and fixed, and so were those of the colleges in England. English colleges were for the few, trained in the so-called "Public Schools"; New England colleges were likewise for a select class, trained by scholarly ministers and by the old Latin schools. English colleges believed in entrance examinations; so did these 25 American colleges along the Atlantic seaboard. A further discussion relative to the presence of entrance examinations, in these colleges, and the absence of admission by certificate will be made after additional facts have been examined.

So far the question has been discussed from the standpoint of the colleges; it will now be taken up on the side of the schools.

*Primary and Secondary School Systems in the United States,
Until 1870*¹⁰

For the purposes of later comparisons and discussions the states and territories are arranged in five groups, as were the colleges and universities in previous tables. While the grouping is based upon educational and not upon geographical conditions,

¹⁰ The data upon which the following tables of facts are based are found in the Report of the United States Commissioner of Education, 1870-71, Vol. 2. The page references, given in the tables, are to that volume.

the fact is worthy of note that no state or territory is removed from geographical contiguity with the other states and territories of its own group.

TABLE VI

PRIMARY AND SECONDARY SCHOOL SYSTEMS IN THE SOUTHERN DIVISION OF THE UNITED STATES, ABOUT 1870			
Nos.	States	Dates	Facts
1.	Alabama:	1868,	New school law. Trouble in putting new law into operation. Lack of school funds. 4000 free schools established. (p. 81)
		1870,	"Alabama, after the friends of education had put forth most strenuous efforts, and secured the general opening of schools with hopes of permanent success in the establishment of free and universal education, now debates the question of advancing or retreating."—Commissioner. (p. 5)
2.	Arkansas:	1869,	Children of school age, 180,000; connected with schools during year, "about" 100,000. Want of funds. Apathy, in some sections, hostility toward free schools. (p. 86)
		1870,	"School prospects are brightening every day in Arkansas." Dr. Sears, Agent of Peabody Fund. (p. 86)
			"School prospects are brightening every day in Arkansas." Thomas Smith, State Superintendent. (p. 87)
			"Arkansas, encountering the obstacles common to the regions where slavery has been abolished, has secured a greater success than a majority of the Southern States."—Commissioner. (p. 15)
3.	Florida:	1869,	School law passed.
		1870,	"Florida...has hesitated in giving the greatest efficiency to the system sought to be established, and yet presents reasons for anticipating the general prevalence of free schools."—Commissioner. (p. 15)
4.	Georgia:	1870,	"Georgia has just passed a school law and appointed a State Commissioner, but must wait a year for funds with which to put the system into full operation."—Commissioner. (p. 16)
5.	Kentucky:	1869,	Legislature refused to revise inefficient school laws. Contest between State Superintendent and Legislature. (p. 147)
6.	Louisiana:	1867-1868,	Large portion of school fund lost.
		1869,	New school law provided for mixed (whites and negroes) schools which rendered whole system obnoxious. (p. 150)
7.	Mississippi:	1870,	School law passed. (p. 200)
			"Mississippi, although commencing late, is progressing steadily and efficiently in the establishment of a system of free schools, notwithstanding the great and bitter opposition, appointing county superintendents, collecting the school tax, and building school houses."—Commissioner. (p. 15)

8. North Carolina: 1869, School law passed. (p. 248)
1870, "No information as to the number of public schools, of any grade, conducted under state auspices, or of pupils receiving instruction at state expense."—Commissioner. (p. 248)
9. South Carolina: 1868, Educational Department organized, but little accomplished. (p. 285)
1870, "The failure of the general assembly to pass a school bill at last session has delayed work for nearly a year. The children of the State are daily growing up in ignorance."—Commissioner. (p. 285)
10. Tennessee: 1867, Passed revised school law. (p. 286)
1868, Entire school population, 410,000; enrolled in schools, 185,845. (p. 286)
1869, First report of Superintendent of Public Instruction. (p. 286)
1870, Since above report was published, main features of law before secession restored. State supervision abolished. (p. 287)
11. Texas: 1870, "In Texas no school legislation has, so far, succeeded and no public officers are at work for the organization of schools, her entire population being left to grow up in ignorance, save as here and there a private enterprise throws a ray of light upon the general darkness."—Commissioner. (p. 16)
12. Virginia: 1870, System of public free schools established. (p. 295)
"Virginia is putting a free school system into operation, but encountering great difficulties in the lack of means, the want of correct information of what a free school system is, and in the absence of school houses and qualified school officers and teachers."—Commissioner. (p. 15)
13. West Virginia: 1870, Free public schools had been established before this date. Pupils, 6 to 21 years old, 59,028; enrolled in public schools, 36,684. (p. 299)
"The school law is very good, but in some cases not conscientiously carried out."—Commissioner. (p. 300)

Observations Based on Table VI

In the absence of statistical data, facts based upon indirect sources are found in Table VI. These facts, when coupled with others of common knowledge, adequately meet the needs for which the table has been arranged. The question, why admission to college by certificate had never been taken up in the South previous to 1870, and indeed for years thereafter, may be at least partially answered with the aid of Tables II, III, and

VI. Table II gives the conditions of the state universities, Table III the conditions of the independent and denominational colleges, and Table VI exhibits the status of public school systems. A very valuable addition to the information given in these tables would be a detailed account of private academies. Since no system of admission to college by certificate from academies alone has ever grown up in the United States, the discussion as to why this should be true will be left until later. The reasons that the dates and their accompanying occurrences are included in the years 1868, 1869, and 1870, are potent. No free public schools, in current acceptance, existed in the South previous to the War. Every one of the Southern state universities named in Table I charged tuition. The idea of popular education was by no means widespread. The war practically closed all Southern educational institutions.

As one of the earlier types of so-called public schools operated in the South, that of Georgia may be cited: "The public schools have been operated throughout the State under what is commonly known as the 'poor school law' administered by the board of education in each county, composed of the ordinary—an officer peculiar to this State and a commissioner, appointed by the judge of the Supreme court. Under this system teachers receive seven cents per day for each pupil in actual attendance; paid *once* per annum, at the end of the year. Salaried teachers are the exception."¹¹

The new public school systems were introduced into the South, to some extent, by outside influences. Their introduction was accompanied by the deep-seated and inflammable question of social equality between two widely different races. In some of the states school laws were passed providing for the education of Whites and Blacks in the same schools. Such laws brought public free schools into such ill-repute that years were required to remove the antipathy.

Whatever factors may be omitted, Table VI answers the chief purpose for which it was arranged. It shows that the public primary and secondary school systems of the Southern states were either non-existent or in an extremely chaotic condition at the time under consideration.

¹¹ U. S. Com. Rept., 1870-71, Vol. 2, p. 110.

TABLE VII
PRIMARY AND SECONDARY SCHOOL SYSTEMS IN THE MOUNTAIN AND
PACIFIC DIVISIONS OF THE UNITED STATES, ABOUT 1870

Mountain Division

No.	States	Dates	Facts
1.	Arizona T.:	1867,	"An act concerning common schools passed the legislature. . . . Arizona has never had any schools worth mentioning."—Commissioner. (p. 318)
2.	Colorado T.:	1870,	"Though repeatedly sought for, but little school information has been received from this Territory."—Commissioner. (p. 318)
3.	Dakota T.:	1869, Act to provide common schools approved. (p. 320) 1870, Number of schools, 55; pupils enrolled, 1765. (p. 319)	
4.	Idaho T.:	1867-1868,	Number of schools, 15; number of children 5 to 21 years old, 926; number attending school, 345. "Our school law is ambiguous and no material changes have been made in it of late, only to confuse the operations of the same."—Daniel Cram, Superintendent. (p. 321)
5.	Indian T.:	1870,	A superintendent in each Nation; District boards in charge of schools; "Two-thirds of the school population are without any education, or at least are not in attendance."—Commissioner. (p. 344)
6.	Montana T.:	1864-1865,	School law passed. Superintendent elected. 1868, Superintendent reported conditions of schools as unfavorable; System criticised as not being adaptable to conditions. (pp. 323, 324)
7.	New Mexico T.:	1870,	"No general school law and not a public school or school-house in the Territory."—Statement based on report of Hon. William A. Pile, Governor of New Mexico. (p. 326)
8.	Utah T.:	1869,	Number of children, 4 to 16 years old, 24,138; number in school, 10,618. Character of school system not discernible from school laws. Probably tuition, per pupil, charged to pay teachers. (p. 328)
9.	Wyoming T.:	1869,	School law passed, but little progress made in establishing schools. (p. 336)

Pacific Division

10.	California:	1849,	First public school in the state established in San Francisco. 1851, First school law enacted by legislature. 1852, School law revised. (p. 88) 1869, Number of scholastics, 5 to 15 years old, 112,743; number of schools, 1268; number of pupils enrolled, all ages, 73,754; number attending private schools, 16,273; number not in any school, 25,464; average daily attendance, 49,802. (p. 87) Two high schools in San Francisco. (p. 92)
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11. Nevada: 1868, Fourth annual report State Superintendent. Number of schools in the State, 39; number of children, 6 to 18 years old, 3,293; number in public schools, 1661; number in private schools, 496; number not attending school, 462. (p. 213)
12. Oregon: 1870, Some schools established. No state board of education; no state superintendent. No statistical report made. (p. 268)
13. Washington T.: 1870, No report.
 "We have no territorial commission or bureau as a head of the school system, through which the census of our schools can be gathered."—James Scott, Secretary of the Territory. (p. 333)

Observations Based on Table VII

An examination of the facts submitted in Table VII leads unmistakably to the conclusion that not a single one of the territories possessed an efficient system of primary and secondary schools in 1870. Although a state, Oregon ranked with the territories educationally. California was the only state, either in the South or west of the Mississippi Valley, that could be credited with anything approximating a working system of lower schools. In that state less than one-half of the children were in daily attendance and 22 per cent were not enrolled in school at all. The final conclusion must be that on the hypothesis that admission to college by certificate presumes a lower system of schools upon which the higher system rests as a basis, with the possible exception of California, the search for such lower system is in vain so far as the Rocky Mountain and Pacific divisions of the United States were concerned at the time under discussion.

TABLE VIII¹PRIMARY AND SECONDARY SCHOOL SYSTEMS IN THE MIDDLE WEST
DIVISION OF THE UNITED STATES ABOUT 1870

No.	States	Dates of Reports	No. of Scholastics	Ages	No. of Public Schools	No. of Private Schools	Pupils in Public Schools	Pupils in Private Schools	Not in School
1	Illinois.....	1868	833030	6 to 21	10705 ²	584 ³	706780	36912	17%
2	Indiana.....	1868	591661	6 to 21	8403	13 ⁴	436736 ⁵	1811 ⁴	25%
3	Iowa.....	1870	418168	5 to 21	6788 ⁶	125 ⁷	296138	8928	27%
4	Kansas.....	1860	92517	5 to 21	1213	?	58681	2784 ⁸	34%
5	Michigan ⁹	1869	374744	5 to 20	4921 ¹⁰	? ¹¹	"about"	?	28%
6	Minnesota.....	1860	144414	5 to 21	3104	161 ¹²	102086	1150	29%
7	Missouri ¹³	1869	584026	5 to 21	5307 ¹⁴	707	249727	17702	55%
8	Nebraska ¹⁵	1870							
9	Ohio.....	1869	1028877	5 to 21	11918	87 ¹⁶	740382 ¹⁷	9846	26%
10	Wisconsin.....	1869	398747	4 to 20	4742	37 ¹⁸	245435	15389	44%

¹ Statistics in this table were taken from U. S. Com. Rept., 1870-71, Vol. 2. Page references in notes are to same.

² Number of graded schools, 634. (p. 112)

³ Outside Chicago only 2½ per cent of pupils in private schools. (p. 112)

⁴ In Indianapolis alone. (p. 127)

⁵ 10901 in high schools. (p. 123)

⁶ Number of graded schools, 221. (p. 130)

⁷ Colleges and academies, 53 with 4728 students; "private and denominational schools," 72 with 4200 pupils. (p. 132)

⁸ "In select schools and colleges." (p. 141)

⁹ Free schools in operation less than one year. Previously had "rate" schools. (p. 185)

¹⁰ 236 "graded school districts." (p. 185)

¹¹ No report on private schools.

¹² Includes colleges, academies and primary schools. Not all reported. (pp. 196, 197)

¹³ "The growth of public education by the State has been slow, and by forced methods, at times in advance of popular favor; and yet far behind the enlightened position of other states." (p. 202)

¹⁴ Number of high schools, 63. (p. 202)

¹⁵ After "many and repeated efforts" no report could be obtained. (p. 212)

¹⁶ Includes normal schools and academies, colleges and universities, and seminaries. Not all reported. (p. 252)

¹⁷ Includes 12146 high school pupils. (p. 252)

¹⁸ In Milwaukee alone. These 37 schools had 6365 pupils. (p. 304)

Observations Based on Table VIII

Table VIII is based on more satisfactory data than are Tables VI and VII. While full reports are not always given for private schools, enough figures are available to justify fairly reliable estimates. In all of the states named in the table, except in Nebraska for which no report was given, systems of free public schools existed. However, at the times of the annual reports, the attendance was much below the scholastic enrollment. From the last column of the table, it may be seen that large numbers in the different states were not enrolled in school at all. The per cent of non-enrollment for the different states was calculated from the figures given in the table. The numbers of private schools in Illinois and Missouri seem large; but when the numbers of pupils attending those schools are compared with

the numbers of pupils in the public schools, it is revealed that only 7 per cent of the pupils in Missouri, and 5 per cent in Illinois were in private schools. In the states of the Middle West the scholastic period was long. In five of the states the school period extended from 5 to 21 years of age; in two states from 6 to 21 years of age; in one state from 5 to 20 years of age; and in one state from 5 to 20 years of age.

The data submitted, when examined, lead to the belief that primary and secondary school systems were becoming fairly well established in the Middle West by 1870.

TABLE IX¹

PRIMARY AND SECONDARY SCHOOL SYSTEMS IN THE NORTHEASTERN
DIVISION OF THE UNITED STATES UNTIL 1870

No.	States	Dates of Reports	No. of Scholastics	Ages	No. of Public Schools	No. of Private Schools	Pupils in Public Schools	Pupils in Private Schools
1	Connecticut....	1870	125407	4 to 16	1647	?	105313	9583
2	Delaware ²							
3	Maine.....	1860	226143	4 to 21	4019	?	135202 ³	?
4	Maryland ⁴	1860	100000	?	1347	?	75402	?
5	Massachusetts ⁵ .	1860	260987	5 to 15	4959	526	247381 ³	20386
6	New Hampshire	1860	78830	4 to 14	2528	?	60762	?
7	New Jersey....	1860	240370	5 to 18	1381	351	102001	?
8	New York.....	1860	1463299	5 to 21	11750	1491	998664	125931
9	Pennsylvania...	1869	975753	?	13936	?	815753	85000
10	Rhode Island...	1868	?	?	630	?	20477 ³	?
11	Vermont ⁶	1860	76759	4 to 14	3080	36	76973 ⁷	?

¹ The data found in this table were compiled from U. S. Com. Rept., 1870-1871, Vol. 2. The page references in the notes are to that volume.

² No general statistical report. Provisions for education same as before the War. Municipalities might tax themselves for school purposes, or not, as they saw fit. (p. 14)

³ Had "Summer" and "Winter" schools. The attendance given in the table is for "Winter" term.

⁴ Average attendance less than 34000. (p. 158)

⁵ 175 high schools; 45 incorporated academies. (p. 166)

⁶ Schools in poor condition; 1600 schools, more than one-half of all, had an average attendance of less than 15 pupils. (pp. 291-292)

⁷ The number reported in school evidently included pupils outside scholastic age.

Observations Based on Table IX

That Table IX is disappointing because of incompleteness must be admitted. Especially is the dearth of statistics concerning private schools regrettable. It would be a considerable factor in this study if accurate statistics could be presented concerning attendance in both public and private schools in this division of states. Since the data are meager it will be necessary to make the most of them.

The scholastic periods in at least four of the six New England states, as shown by the table, began with the child at 4 or 5 years of age and continued until it was 14, 15 or 16 years old.

The periods began a year or two earlier but closed from 4 to 7 years earlier than those of the Middle West. The average scholastic period for New Hampshire, Vermont, Massachusetts, and Connecticut, the four most populous states in New England, was $10\frac{1}{2}$ years; the corresponding period in nine of the Middle Western states was $15\frac{2}{3}$ years. Thus a difference in length of the scholastic period in the two sections of $5\frac{1}{6}$ years is observed. This is a material fact in the development of school systems.

The systems in the Middle West comprised both primary and secondary schools, while the so-called public schools in New England were largely elementary. A quotation from the report of the schools of Providence, R. I., supports this view: "Only a small proportion of the number of pupils in the public schools ever go into the high schools, the great work of education being accomplished in the grammar, intermediate and primary schools, the number of boys who complete the course is very small."¹² The public schools in New England were not supposed to lead to higher institutions of learning; another system of schools prepared students for college. Moreover, the so-called "free schools" of New England were not free schools in fact. "By the term 'free schools' was not meant a school free in the sense that our public schools are now free; but a school unrestricted as to class of pupils who might attend, and endowed by grants of land, bequests of individuals, or allowance out of the common stock of the town, so as not to depend entirely upon tuition of scholars for the support of the school."¹³ The Connecticut school law making state schools free was passed in 1868. In New York the common schools were not "rendered absolutely free to all children in the state until 1867."¹⁴

The State Superintendent of Public Instruction, in New Jersey, in his annual report for 1869, states: "Six hundred and thirty-four schools are still to be made free." This meant that nearly one-half of New Jersey's so-called "free schools" were partly supported by tuition. That the "common schools," "free schools," and "public schools," as they were designated in the different states under consideration, were largely elementary

¹² U. S. Com. Rept., 1870-71, Vol. 2, p. 282.

¹³ Connecticut Report: U. S. Com. Rept., 1870-71, Vol. 2, p. 98.

¹⁴ U. S. Com. Rept., 1870-71, Vol. 2, p. 228.

schools can be established by reference to the reports of state superintendents made in 1869 and 1870. The following quotation from the report of the State Superintendent, for 1869, makes clear the conditions in Pennsylvania with reference to the kind of schools supported by the state: "Except in the matter of authorizing school directors to grade the schools, where they can be graded, our school law makes no provision for the encouragement of higher education. A district may tax itself to establish and support a high school, but the State lends it no helping hand in so doing."

The relation of the New England and Middle States to private institutions is expressed in the following statement taken from the report of the Commissioner of New York for 1870: "But the State does not monopolize the work of school instruction, nor attempt to exclude others from it. On the contrary, outside and independent of its own public system, it tolerates unincorporated private schools, and, up to the present time, has chartered about 40 literary colleges and 420 academies. . . . These colleges and academies are to some extent regulated, assisted, and used by the State; but they are private corporations, organized by the voluntary act of their proprietors, and operated on their account and at their pleasure. The State has no authority to fix the charges for tuition even to keep them in existence."

The general conclusions to be drawn from Table IX will be found in the summary, at the close of this chapter.

No Admission to Early American Colleges by Certificate and Reasons Why

The failure of early American colleges to adopt any system of admission by certificate was due, in general, to two potent reasons. The first of these was a traditional belief in the efficacy of entrance examinations as a means of testing a student's ability to do college work. It is a fact too well known for debate that Harvard, Yale, Columbia, Princeton, and others of the 26 colleges named in Table V have capitulated step by step or are holding out against the certificating system to-day. The belief in examinations, as proper college admission tests, was

originally based upon undebatable grounds—it was the only method consistent with the conditions.

This belief in college entrance examinations was inherited largely from English colleges. There was no system of free government schools in England previous to 1870. English colleges depended upon the “Latin schools” and the old “Public schools” for the preparation of their students. These preparatory schools were private institutions. They had endowments and governing boards, sometimes, but the standard of any school was largely the product of one man—the head-master. These schools had no closely outlined courses of study. The pupils were not held to any fixed regime. Efficiency in the different schools varied widely. Upon what basis, then, could the graduates of these schools be admitted to college? Two methods might be used. Either the certificate of the head-master might be accepted or the candidate must be examined. Since these preparatory schools varied so widely in methods of control, efficiency of instruction, private interests and uncertainty of standards, and since there was no legal relation between the preparatory schools and colleges, the higher institutions did not think of placing their own standards in the hands of outside individuals, without any checks whatever; and so admission by examination prevailed. Entrance examinations in England were based upon the exigencies of educational conditions.

The early American colleges were largely patterned after English colleges. This fact not only affected the colleges but also determined the early types of secondary schools. “Latin schools” and private schools, similar to some extent to the English preparatory schools, grew up alongside the early American colleges. But these private schools in America were, in the main, more unstable and precarious than the English schools. And so, while tradition influenced and largely determined the conditions of the early preparatory and collegiate institutions in the Northeastern part of the United States, these conditions in turn forced upon the higher and lower schools the same system of admission to college used in England. The early private schools were founded and conducted largely for private gain. Controlling boards were often lacking; the perpetuating influence, known as popular opinion, which acts through school

boards and continues schools even when one corps of teachers is succeeded by another, was absent. Courses of study, which would have enabled the colleges to judge somewhat of the work covered by candidates for admission, were either non-existent or so little used that they formed scant basis for judgment. Except in cases where denominational colleges conducted branch preparatory schools there was little connection of any kind between the colleges and the preparatory institutions. The two sets of institutions were not connected parts of a system. While the lower schools usually strove to prepare some of their pupils for college the nature of their support and patronage brought together different grades of pupils. Much individual teaching was necessary. Individuals, and not classes, were picked out and prepared for college. How should these individuals be tested?—in one way, by examination.

If the assumption be true that, in order to have admission to college by certificate, there must be two parts connected in one system or two systems closely linked together, it may be readily seen that in the absence of either of these conditions no system of admission by certificate could properly exist in the early American colleges.

Chapter Summary

Theses announced in the beginning of the chapter:

1. Admission to college by certificate presumes two separate educational systems; or, two separate and well-defined parts of one and the same system.
2. One of the two systems, or one of the two parts of the same system, is higher than the other; and the higher system, or part, rests upon the lower as a basis.
3. It is claimed that in the earlier days of the American colleges there were two separate and distinct systems, that these two systems were independent of each other, and hence there was no system of admission from one to the other by certificate.
4. Later, the two parts were united into one system and appeared together in the same institution; but the two parts of the institution, the lower and the higher, were so blended together that no formal transfer from one to the other was found necessary.
5. When state universities and state free school systems were

first established, they tended to function, for some time, as two separate and unrelated systems.

6. The history of the evolution of the system of admission to college by certificate is also the history of an effort to unite two separate state systems into two closely related and mutually co-operative parts of one system.

The facts shown in Table I pertain to the foundation of state universities and more especially to their reorganization in the last years of the period studied. Of the twenty-six state universities founded before 1870 all but four were endowed, at some time, by the Federal Government. The first grants were made as early as 1804. From time to time thereafter, usually when they were admitted into the Union, the different states received lands for the founding of institutions of learning. The provision for the establishment of agricultural and mechanical colleges by the Morrill Land Grant Act, of July 2, 1862, gave a powerful impetus not only to the founding of new institutions but also to the awakening and reorganization of state universities already in existence. To a considerable extent that act was instrumental in broadening the curricula of American colleges.

The dates show that the Federal endowments usually led, at an early date, to educational acts of state legislatures. Sometimes the openings of the universities were delayed for some years. The universities in the Southern states were the first founded but in general led more or less uncertain careers until they were finally closed by the exigencies of the Civil War. The second group to be organized were those of the Middle West; and from the dates of their foundations their movements were vigorous and promising. The Supplement to Table I shows the deleterious effects of the Civil War upon all state universities, and the subsequent reorganization and expansion of practically every one of them between the close of the War and 1870.

An important fact in connection with this study is brought out in Table II. Of the twenty-three state institutions, open to students, the only one not doing preparatory work was the University of Michigan. The different universities either conducted preparatory departments or provided for preparatory classes to

be taught by the college professors. At least one-half of all of the students in all of the state universities taken together were doing preparatory work. The point to be emphasized is that only one state university in the United States had a distinct need for a system of admission by certificate in 1870.

The conclusions which may be reasonably drawn from Table III are: (1) that a goodly number of the 184 institutions reporting as colleges were little more than elementary and preparatory schools; (2) that all but two of these 184 institutions were doing more or less preparatory work; (3) that more than one-half of all students reported were partly or fully below college rank; and (4) that since Tables II and III represent all of the colleges in the twenty-six states having state universities, with the exception of the University of Michigan and two small colleges in the South, there was no need of admission to college by certificate in any of the state or private institutions in these states, for the reason that the colleges and universities were doing their own preparatory work.

Table IV discloses facts, in states not having state universities, concerning the same points considered in Tables II and III; but the facts themselves are very different. In the states and territories outside New England and New York, New Jersey and Pennsylvania, higher education made little showing. In five of the seven states not having state universities, and reporting colleges of strength, students were admitted on examination alone; no preparatory departments were attached. These conditions would tend to raise the question of admission to college by certificate. Later, reasons are suggested for the fact that no such system was used.

Two significant conditions are presented in Table V. Of the 26 institutions represented all but two were founded by churches or church influences. A knowledge of early educational history immediately suggests the influences of English colleges on the early church colleges. The more important fact, so far as this study is concerned, is that, of the 26 institutions reporting no preparatory departments in 1870, only one, the University of Michigan, was a state university.

From Table VI may be learned the real status of primary and secondary free schools in the Southern states for the years fol-

lowing the close of the Civil War. But one conclusion seems possible. Admission to college by certificate in the South had not become a need since there were no efficient systems of primary and secondary schools.

Combining facts presented in Tables I, II, and VI, the conclusion becomes patent that neither Southern colleges nor Southern school systems were yet developed either as two systems or as two well defined and correlated parts of one system; and that preparatory and collegiate classes were so mingled in the same institutions and in such a way that the question of admission to college by certificate did not become a practical problem.

The facts given in Table VII are more meager than those given in Table VI. The conditions, however, in the Rocky Mountain and Pacific states and territories were less developed than those in the Southern states, and show in a more striking manner the utter lack of any need for raising the question at issue.

Table VIII furnishes statistics upon which the following general statements are based: (1) the reports from the states of the Middle West were more nearly complete than those from other states; (2) the average scholastic period for nine states was $15\frac{2}{3}$ years, thus furnishing to the child ample time to complete both the elementary and high school courses under the supervision of the states; and (3) the public free school systems in most of the states of this division were becoming well established as shown by the attendance and the relatively small number of pupils reported in private schools. When facts found in Tables I, II, and VIII are considered together a further thought is suggested. With public free primary and secondary school systems rapidly growing in popularity and efficiency and with the state universities reorganizing and expanding their work, the idea of a closer relation between the two systems, fostered by the state, would, naturally and logically, come up for consideration.

Table IX and the facts interpolated in the observations made upon it seem to support the following conclusions: (1) the state school systems in the Northeastern part of the United States were not all free in 1870, and some of them had been made free just previous to that date; (2) these systems were founded and

supported for the purpose of furnishing elementary training and did not aspire to train students for colleges; (3) the scholastic period, with an average length of $10\frac{1}{2}$ years in four New England States, tended to militate against the development of a system of free state high schools; (4) in these states, there existed three separate parts of a complete school system—state elementary schools, private preparatory schools, and independent colleges; and (5) these three parts were so supported, organized, and controlled that they were never united into one system, and hence the matter of admission to college by certificate did not appear.

The final recapitulation on the bases of the original theses may be made:

In the early history of education in the United States, three separate and distinct parts of a complete system prevailed,—a state semi-free school system, a system of private elementary and secondary schools, and a system of independent colleges. These three systems were so supported, organized, and controlled that no system of admission to college by certificate was practicable. Later, when educational work began to develop in the South and West, elementary, secondary, and college classes were all found in one institution. These three classes of work were so confused or blended together that there was no need of a formal transfer from one department of work to another. When the states came to the development of state universities and state free school systems, and after certain progress had been made, the problem of the proper relations between the secondary schools and the colleges became vital. That the question was first taken up in the Middle West, should seem strange to no one who will study educational conditions in the United States about 1870. Furthermore, that the University of Michigan, the only state university in the Middle West and indeed the only state university in the entire list of twenty-six institutions admitting students by examination only, should be the first to attack the problem of admission to college by certificate, does not seem to have been a matter of chance but a perfectly logical result of concrete educational conditions.

CHAPTER III

THE ORIGIN AND EVOLUTION OF THE SYSTEM

ORIGIN

It was shown in the last chapter that the period following the close of the Civil War was marked by the organization and reorganization of state public school systems and state universities. Out of that movement arose a new system of admission to college.

Before taking up the different steps in the evolution of this new system, as found in the records of nine state universities, it may be well to notice briefly the feeling of dissatisfaction with private preparatory schools, the source from which the new system emanated and the immediate conditions attending its introduction into the University of Michigan.

Evidence may be adduced to support the belief that the academies, which supplanted the earlier Latin grammar schools, were never satisfactory feeders to the colleges. Furthermore, at this time the old regime colleges saw the conditions and did what they could to better the situation. Under the heading, "Classical Study in the West,"¹ Professor H. K. Edson made an appeal for the perpetuation and organization of "Private Academies." The claim was advanced that public high schools could never adequately prepare students for college. Again, in 1873, President James McCosh, of Princeton University, discussed the need of better secondary schools.²

His strictures upon the academies are severe. After giving data showing the numbers of academies, instructors, and students in 1872, he states that the academies had never prepared any considerable number of students for college. The charge was made that many of the so-called academies were boarding schools, only accessible to the rich, and that "not a few of those at the head of these establishments have no higher ambition than

¹ Proc. N. E. A., 1871, pp. 160-164.

² Proc. N. E. A., Vol. 3, 1873, "Upper Schools,"—James McCosh.

to earn a livelihood for the present and in the course of years lay up a competency to make them independent."

The meeting before which President McCosh read his paper on "Upper Schools" appointed a committee on "Intermediate Schools" to report the next year. The report³ was read by the Chairman, Reverend George P. Hays, and contained statements bearing directly on this study. He stated: "The need (for intermediate schools) is universal and is recognized by the mass of our educational men." Four agents for preparing students for college were named: preparatory schools attached to colleges, academies, high schools, and private tutors. It was pointed out that the first and last were merely temporary. The report runs: "It is too much overlooked that the colleges and common schools are closely related to each other. . . . As a result, the high school affiliates with the common school, and the academy with the college; and the college and common school are utterly indifferent to their mutual interests." The further claim was made that the free school system had brought about the decline of the academies in two ways: (1) by drawing off pupils; (2) by engendering dislike to paying tuition sufficient to secure good teachers. An appeal followed for the endowment of academies in which it was claimed that, "an efficient academy, dependent solely on its tuition for its maintenance is scarcely to be found."

President Noah Porter, of Yale University, under the title, "Preparatory Schools for Colleges and University Life,"⁴ further reflects conditions, especially as they existed in New England, and saves himself by the use of the word "universally" when he says: "We are not required to think or speak lightly of any of the public high schools to justify the views for which we contend, that the friends of college education cannot rely permanently, and certainly not universally, upon these schools as training places for college and university students." The matter of affiliation is suggested but he adds: "We cannot regard such an arrangement as either practicable or desirable." He then suggests that each college provide its own feeders.

A careful study of the conditions prevailing in the period about 1870 leads to the conclusions, that private academies had failed to meet the demand for college preparatory schools, that

³ Proc. N. E. A., 1874, p. 9.

⁴ Proc. N. E. A., 1874, p. 42.

there was a state of unrest on the part of the colleges and the people at large, and that the state free school systems not only had their own inherent advantages as assets, but found in the field as their only competitors the partially discredited academies.

Professor B. A. Hinsdale, in an article entitled "The Diploma System of Admission to the University of Michigan,"⁵ wrote: "The University of Michigan was the name given by the charter of 1817 to the whole system of public or state instruction as the same should be organized in the Territory of Michigan." He suggests that this idea was borrowed from France, a plausible declaration, at least when viewed in the light of known conditions. Napoleon, nine years before, had organized the French educational institutions upon this plan.⁶

The author, cited, quotes from a Decret of March 17, 1808: "Public instruction throughout the empire is confined exclusively to the university." The entire Republic of France is divided into seventeen divisions called academies. At the head of each academy stands a university which has more or less control over all grades of education within its territory. It will be seen that these conditions correspond with the statements made by Hinsdale.

When the Board of Regents met, twenty years later, to organize the University of Michigan, the ideas of 1817 controlled.⁷ On June 21, 1837, the Board decided to establish eight branches although there was as yet no parent institution. The first one of these branches was opened at Pontiac in September of that year. The writer can confirm Farrand's statement: "The records of the Board of Regents for 1837 and for several succeeding years are largely concerned with transactions in regard to the branch schools." One by one these branches were discontinued, until 1848, as recorded in the preceding chapter of this study, when all support was finally withdrawn. From 1848 to 1871 the University was only indirectly interested in preparatory schools.

But Michigan was not the only state to adopt the French plan.

⁵ Proc. North Central Association of Colleges and Secondary Schools, 1896, p. 51.

⁶ Farrington, French Secondary Schools, p. 67.

⁷ Farrand, History of the University of Michigan, p. 27.

The "Guyer Act,"⁸ providing for the organization of the University of Missouri, planned for the establishment of academies and seminaries over the State as branches of the University. Provisions were made for the incorporation of academies already in existence. No attempt was ever made, however, to carry out the plan, and four years later that part of the law pertaining to the establishment of academies and seminaries was repealed.

The influence of English conditions upon preparatory schools and colleges, especially along the Atlantic coast, was discussed in the preceding chapter; the French system became, for a time, the model of two of the states under consideration; it remains now to point out the fact that President Frieze had neither the English system nor the French system in mind when he made his report which later led to the adoption of the method of admission to college by certificate. In his report, dated September 20, 1870, he used the following statements: "If a genuine university is ever to exist, either here or anywhere else in America, it is to be built on a much higher scholarship in the preparatory schools and academies. These must be advanced to the character of gymnasiums, and they must do a large part of the work of our present colleges, before a university shall be possible. . . . The remedy lies in raising step by step the requirements for admission to the academic department, not only in the classics and mathematics, but in every branch of gymnasial study until at least the local high schools shall have occupied their proper ground, and the university shall thus be enabled to take on its true character and functions." Not only in the quotation given but throughout his entire report, the words "gymnasium," "high school," and "university" are used in such relation as to leave little or no doubt that the German school system, and not the French or English, was held in mind. But whatever may have been the goal toward which President Frieze was steering, he was in the midst of conditions pregnant with demands and opportunities. Some of these conditions he sets forth in his report under the heading: "Advantages possessed by Michigan in its High Schools." It seems relevant to quote from his report as follows: "I cannot but think that there are exist-

⁸ Session Acts of Missouri, 1839, pp. 176-179. Cited by James I. Malott in an unpublished thesis: "The University of Missouri as a Centralizing Factor in the Educational Activities of the State."

ing within this state the conditions which, seized upon now and carefully watched and improved, will in the end develop the gymnasium in its proper place, and secure to us the true university. One public high school of the state at the close of the present year has sent into our academic department a class of thirty-five students, well prepared. The high schools of the state in general are yearly coming into more intimate relations to the University, and sending increasing numbers to its halls." After discussing at some length the great advantages of cooperation between the university and the schools in raising educational standards the report continues: "Most fortunately, in this effort we are assured of the hearty sympathy and cooperation of the State Union and High Schools."

In the quotations given in the last paragraph three points are made. First, President Frieze was working for higher scholastic standards and was holding in mind the German conditions; second, he realized that favorable opportunities were at hand; third, there was a desire for cooperation between the schools and the university.

Two more points should be considered before leaving this report. It was not the plan of a single man; and the plan itself did not contemplate the admission of students, from the high schools, without being examined by members of the Faculty of the University. The following quotation is given to establish these points: "And, as a means of strengthening, consolidating, and elevating the whole state system, some of our best educators, both in the local schools and in the university, have proposed that a commission of examiners from the academic faculty should visit annually such schools as may desire it, and give certificates to those pupils who may be successful in their examinations, entitling them to admission without further examination, to the university."⁹

Recapitulation

1. When the question of admission to college by certificate was first taken up by the University of Michigan there was a great need felt throughout the entire country for more and better secondary schools. The academies had never served to any considerable extent as college preparatory schools. There was a

⁹ Report of President H. S. Frieze to Bd. of Reg., Sept. 20, 1870.

strong feeling, especially among those connected with the independent colleges, that the state high schools could never adequately prepare students for college in any considerable numbers.

2. At least two attempts were made to copy the school system of France. In both cases failure attended the efforts.

3. That President Frieze had fully in mind the hope of developing a state school system in Michigan similar to that existing in Germany was clearly shown by his reports to the Board of Regents.

4. The system of admission to college proposed by President Frieze, and seemingly approved by the high schools, was to be based upon examinations set by members of the Academic Faculty of the University.

EVOLUTION OF THE SYSTEM

*A Critical Study of the Records of Nine State Universities with Respect to the Origin and Development of Their Systems of Admitting Students on Certificate.*¹⁰

The purpose of this part of the study is to ascertain as nearly as possible the important steps taken by the different institutions in developing their respective systems of certification. With this object in view the following factors will be considered: (1) the influences of the schools and the colleges upon each other with reference to changes in entrance requirements; (2) the appearance and recognition of new subjects; (3) the effects of the elimination of preparatory departments upon the schools and colleges; and (4) the relation between the increase in the number of accredited schools and the enrollment of students in the universities.

First Decade of the Certifying System

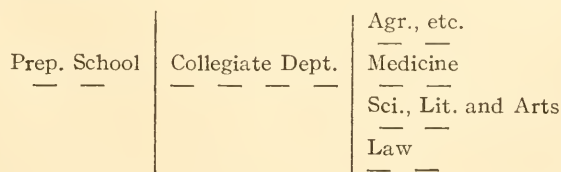
1871

On November 14, after President Frieze made his report to the Board of Regents; September 20, 1870, the Faculty of the University of Michigan appointed a committee "to see if some

¹⁰ The facts here presented were gathered from the records of the Boards of Control, from the Minutes of the Faculties, and from the Catalogues of the institutions named, and for the years indicated. Verifications may be made by dates and context.

system cannot be devised by which the high schools of the state can be brought into closer connection with the university"; and on February 27, of the following year, the plan recommended was approved. Then, followed notice to the schools, the preparation of questions to be answered by school boards, applications of schools, the appointment of visitors from the Faculty, and on June 19, 1871, "on motion the secretary was authorized to inform the superintendents of the high schools at Adrian, Jackson, Flint and Ann Arbor, that for the present year students will be admitted to the university on their certificates stating that they have studied all that is required for admission and are qualified to enter." At this meeting a schedule of inquiries for the use of visitors was submitted. The motion quoted specifies that the schools are accredited "for the present year" and that the certificates must state not only that the applicants have studied "all that is required" but that they "are qualified to enter." Thus were introduced two vital questions: For what time shall a school be accredited? What responsibility shall be placed upon superintendents, principals and teachers in judging a pupil's ability to do college work beyond the mere fact that he makes passing grades in the high school?

While Michigan was extending to the high schools the hand of cooperation, the attitude of President W. N. Folwell and the University of Minnesota should not pass unnoticed. The Announcement for 1870-1871 contains the following statement: "Notice is hereby given that, after the close of the academic year 1870-1871, only the Latin course will be offered in this school. It is part of the plan of organization that the studies, not only of the preparatory school, but also of the collegiate department, be dropped off as fast as the high schools can take the work. The university begins always wherever they leave off." The plan of organization of the university is represented by the following diagram:



According to the notice quoted it was intended that the preparatory and collegiate work should ultimately be done by the high schools. Here again may be noted the influence of the German system. The determination to limit the preparatory work to the Latin course, as quoted, marked the beginning of a movement by the University of Minnesota not only to eliminate preparatory work from the university but to build up an efficient system of free public high schools in the state.

1872

Within the year 1872, Michigan, Minnesota, Iowa, and Wisconsin dealt directly or indirectly with the high schools.

Michigan sent notices to the schools stating that members of the faculty would be glad to visit them on request; the time for which a high school diploma would be honored after graduation was limited to three months; and accredited schools were required to make application annually for inspection. "The privilege of admission on diploma is limited to public schools in Michigan." In order for a school to be credited it was necessary for it to teach all of the subjects required for admission to one of three courses. While it was originally intended that members of the university faculty should hold formal examinations in the schools, it does not appear that the plan was carried out. The special notice printed in the Catalogue for 1871-1872 contains the statement that a committee will visit the schools, make reports to the faculty, and "if the faculty shall be satisfied from such report that the preparatory courses of study in the school thus visited embrace all the subjects required for admission to the university, and are taught by competent instructors, then the graduates from such preparatory courses will be admitted to the Freshman class of the university without examination."

The second step taken by the University of Minnesota in behalf of local high schools was recorded when the Board of Regents, August 3, 1872, directed the faculty not to admit any applicant "to the Latin school coming from those districts of the state in which high schools now exist, and that a certificate from the county superintendent, or principal teacher of the district shall be sufficient evidence of the fact."

The state legislature of Wisconsin passed a law, approved

March, 1872, providing that graduates of graded schools who should pass examinations at such schools, "satisfactory to the Faculty of the University for admission into the sub-freshman class and college classes of the university," would be entitled to free tuition. The faculty adopted regulations to govern the examinations. The subjects and numbers of questions to be submitted were designated. The questions were presumably set by the principals, although this fact is not definitely settled until three years later. The papers were to be graded by the principals and the questions and papers were then to be forwarded to the President of the University. The papers were to be accompanied by a certificate stating that they were prepared by graduates of the schools and that the examinations were fairly conducted.

On June 21, 1872, the Board of Regents of the University of Iowa passed a resolution permitting the faculty to admit students from schools and academies without examination; but exactly four years passed before any plans were announced in compliance with the resolution.

1873

The first state board of education in Indiana was a political organization composed of certain state officers. In 1865, the board was changed to an educational body including the Governor, Superintendent of Public Instruction, President of Indiana University, and the superintendents of the three largest cities in the state. In 1873, A. M. Gow was superintendent of schools at Evansville; and, by virtue of that fact, was a member of the State Board of Education. For some years the question of closer relations between the university and high schools of the state had been a subject of "earnest and protracted discussion in state teachers' and collegiate associations, in state institutes, in educational conventions and the State Board of Education." On April 9, 1873, a committee of the State Board of Education presented a resolution recommending to the authorities of the university that they admit students to the Freshman and Sophomore classes on certificate. For some reason, not explained in the minutes, the resolution was tabled. On May 5 following, as the minutes show, the State Board passed a resolution recommending to the Faculty of the University that they so modify

the preparatory course of study as to admit students to the Freshman class without any knowledge of Greek. Professor Gow was requested to present the resolution to the Faculty and Trustees at their meeting in June. Two days later, at a meeting of superintendents and principals held in Indianapolis, the matter of closer relations between the high schools and the university was considered. A plan was approved at the meeting and Gow was requested to present it to the Trustees of the University. On July 18, 1873, the Trustees passed an order providing that preparatory students and college students should not be allowed to recite in the same classes, and that students should be admitted to the Freshman class on certificate from certain schools to be named by the State Board of Education. These details are given to throw light on the influences involved in the introduction of the certificate system in Indiana. General agitation, action of the State Board, recommendations of superintendents and principals, and final action by the Trustees represent the steps taken. The attitude of the faculty is not divulged in the minutes, but it seems probable that the President of the University was favorable to the movement since his name is signed to the first resolution presented to the State Board of Education.

The matter of greatest importance is that a body outside the University, the State Board of Education, is designated to select the schools from which certificates are to be received. It should not be overlooked, however, that the President of the University was a member of the selecting board.

In 1873, the University of Illinois made its first move toward admission by certificate by providing that entrance examinations might be held by county superintendents. The questions and instructions for holding the examinations were furnished by the University, but the language of the announcement implies that the papers were to be graded and the certificates issued by the county superintendent; for, we read, "those who pass creditably, will, when they present the superintendent's certificate to that effect, be admitted to the university classes. They will pay their fees, but their matriculation papers will be withheld until they shall have passed the regular examinations of the first term of their attendance." This method of admission, designated by "County Superintendent's Certificate," adds a new phase in that

neither the University Faculty, the instructors of the students, nor a general board, but one man, who might know little of university standards and who might have no personal knowledge of the candidates, was entrusted with the certification. The Faculty required that, in case the applicant was not known by the superintendent, letters of introduction should be presented. It must also be noted that the applicants were practically admitted to the University on trial.

1874

Entrance by teacher's certificate is suggested in connection with the announcement of the University of Ohio in the catalogue for 1873-1874. The following paragraphs are quoted: "For admission to the college, students must possess a competent knowledge of the branches taught in the common schools.

"If it be asked what is a competent knowledge of these branches, it may be answered that the candidate should certainly have knowledge enough of them to entitle him to a teacher's certificate from a County Board of Examiners.

"It is expected that graduates of high schools will often be able to enter the second year of the prescribed course."

While it is not stated that students would be admitted on teacher's certificates it seems to be implied. It is a well established fact that, later, admission by teacher's certificate became a popular method in some universities.

1875

A movement bearing indirectly on the question was the indorsement of "Free Town High Schools" by the Board of Regents of the University of Wisconsin, January 20, 1875.

A somewhat more significant step was taken by the Regents of the University of Minnesota, on May 3rd of the same year, when it passed a resolution providing for a committee, "to report to the Board some method by which the high schools and academies of the state may be able to furnish the necessary preparation required by students to fit them for entrance to the regular courses of the University with a view to relieving that institution from all elementary work." The committee was also requested to suggest proper legislative action for bringing about the desired conditions. On December 22, following, a report was

made and another committee was constituted, "to confer with the proper committee of the legislature upon the subject of the report."

Although Indiana had prescribed rules for commissioning high schools in 1873, no provisions seem to have been made for inspection, and on October 1, 1875, the minutes of the state board show that provisions were made for visitation. It does not appear that the provisions yielded immediate results.

Michigan, within the year, requested high schools certifying students to have senior classes review algebra and geometry; and one school was restrained from certifying students "with whose qualifications the actual teachers are not personally acquainted."

The contributions of the year, in the cases of Minnesota and Wisconsin looked to legislative enactment, and in Indiana and Michigan to perfecting systems already in operation.

1876

The resolution of the Board of Regents of the University of Iowa, passed in 1872, with reference to certification, did not bear fruit; and, in 1876, another resolution followed. This time the movement was instigated by a resolution emanating from the Faculty. One point of interest in the resolution, although somewhat obscure, is found in the following wording: "the resolution . . . relating to the admission to the university of students duly certified by teachers of high schools, such teachers to be selected by the Faculty or Regents of the university. . . ."

. . ." The matter of accrediting teachers, and not schools, is suggested. This question has since arisen at different times. Whether it was the idea here to give to certain teachers in schools the right to certificate in their own subjects or whether the word "schools" should appear instead of "teachers" has not been determined. The final resolution of the board gives the right of certification to the principal of the school.

Provisions for certification were passed by the Faculty of the University of Wisconsin September 25, 1876. Later in the year, the faculty recommended to the Board of Regents that preparatory work be entirely thrown back upon the high schools, the change to take place within the next two years. The attitude

on the part of the schools and the university toward the suggested plans was declared to be that of mutual good will and co-operation.

The University of Illinois took a step backward in 1876 by opening a preparatory department. To the provision for "County Superintendent's Certificates," already in operation, principals of high schools were permitted to examine students for admission to the preparatory classes.

In contrast with the opening of the preparatory department in Illinois, Minnesota and Wisconsin were trying to get rid of preparatory work and were striving diligently to build up high schools.

A work of more than passing importance of the year was the appointment of a committee by the Faculty of the University of Michigan to investigate and report the relative ranks of students admitted on examination as compared with those admitted on certificate. This was the first inventory of results. A detailed report was made but is not contained in the Faculty minutes. The following significant statement does occur under date of April 10, 1876: "The Chairman, in summing up, remarked that the table gave as good a show in favor of the diploma students as of the examination students."

1877

In accordance with a resolution passed by the Board of Regents November 13, 1877, the Faculty of the University of Illinois took two steps in the matter of certification. It has already been mentioned that arrangements prevailed for the acceptance of "County Superintendent's Certificates" by the preparatory department. Arrangements are now made for the selection of "Examining Schools." Certain schools, one or more in each county, to be designated by the Faculty, were empowered to set questions and hold examinations but the papers were to be sent to the university for final reading. Another list of schools was to be designated "Accredited High Schools." These schools might certificate students "to any of the colleges for which their studies prepared them." The appointment continued "as long as the work of the school" was "found satisfactory." Here

appears to be added the factor of affiliation for an unlimited period.

The only other matter which seems worthy of notice, this year, was the resolution of the Board of Regents of the University of Minnesota, dated December 21st, a part of which follows: "Resolved, That His Excellency, the Governor be and he is hereby respectfully requested to embody in his message to the State Legislature an emphatic recommendation that provision be made by law to encourage the formation of high schools, in the counties where they are not established, to articulate with the curriculum of the university."

1878

The question of refusing to admit students to the University of Wisconsin, who could secure the same instruction in their own districts, came before the Board of Regents June 19, 1878; and, for some reason, failed to pass. Attention is called to this for the purpose of stressing the fact that in several states the greatest cause of complaint on the part of high schools against the universities was that the continuation of preparatory work by the universities militated heavily against the development of local high schools. In striking contrast with the action of the Wisconsin Board, the following resolution of the Minnesota Board, dated December 28th of the same year, may be cited: "Resolved further, That this Board will fully sustain the Faculty in their efforts to maintain and advance the standard of secondary scholarship irrespective of the number of students and of graduates."

1879

The University of Ohio had been receiving students from the elementary schools of the state for some years. The President, in his annual report to the Board of Regents for the scholastic year ending in 1879, urged that such arrangements be made as would enable a transition from the high schools to the college such as then "maintained between the college and the country schools."

In the Catalogue of the University of Wisconsin for 1878-1879, the announcement appears to the effect that schools would be expected to bear the expenses of visitation. This matter led

later to dissatisfaction and friction in some states before the financial burden was shifted from the schools to the universities.

Certain developments in the practical administration of the system in Indiana, this year, are indicated by the appearance of resolutions providing that certificates must show that students have completed all of the required work in the schools from which they come, and that principals may not examine other than their own students.

1880

The Wisconsin catalogue for 1879-1880 contains this self-explanatory notice: "Examination by papers prepared in the graded schools of the state, having been found unsatisfactory, is discontinued." There also occurs in the same catalogue an advertisement of the Madison High School, one statement of which is to the effect that students recommended by the principal will be admitted to the university without examination. In this statement is found the idea of using the privilege of certification as an advertising asset, a factor which, at all times, has been a serious problem in connection with certification.

Ohio now joins the list of certifying institutions with an entirely new method of selecting schools. A paragraph from the minutes of the Board of Trustees, dated April 20, 1880, sets forth the plan: "Resolved, first, That graduates of high schools in cities of this state whose population equaled or exceeded 5000 at the last census (1870) shall be admitted to Freshman standing in the various courses of the college; provided, that in cases where the course of study, pursued by such graduate, does not include all the studies required as preparatory to the course elected, such student shall be required to pass examination in any or all such studies as are not included."

In 1880, by resolution of the Board of Regents the University of Minnesota admitted students on certificate to the "sub-freshman class." This same year a petition was received from the Principal of the Minneapolis High School asking that his students be admitted to the college classes without examination.

This same year the University of Michigan again took up an investigation concerning the records made by "diploma stu-

dents." After a most thorough study, "an extended report" was made. That report will be considered in a later part of this study.

Second Decade of the Certifying System

1881

The Indiana Faculty which had restricted certificates in 1879 to those who had finished the course revised the order by the following announcement in 1881: "Students who come from Commissioned preparatory schools, not having completed their preparatory studies, and who wish to enter the college classes as conditioned or select students, can do so only upon the written recommendation of the principal and faculty of the preparatory school from which they come."

On March 3, 1881, a law, passed by the legislature of Minnesota, providing for a high school board, was approved. The board met May 2nd, following, and effected an organization with the Governor of the State, as President; the Superintendent of Public Instruction became Secretary, and the President of the State University was made inspector of schools. It will be recalled that the authorities of the state university had been working for some such steps for ten years. It is recorded in the faculty minutes, five days later, that: "A committee was appointed to cooperate with the President in arranging a course of study for the high schools receiving aid from the State." This would tend to connect the university directly with the schools.

1882

The problem of removing conditions has been one of moment. The first regulation encountered regarding this question appears in the faculty minutes of the University of Michigan under date of September 25, 1882. The announcement was made that conditions for admission must be removed within a year ("instead of by the first of December as printed on admission paper") or the student's collegiate work must stop until deficiencies were made up.

Minnesota seems to have taken her first step backward in the matter of supporting, and cooperating with, the high schools, when the faculty, September 5, 1882, two years after providing

for certification, recorded the following resolution: "Resolved, That the present rule authorizing the admission of high school graduates upon certificate of their principals be rescinded after the close of the year 1882-1883." The reasons for this action become apparent in the minutes of the following year.

Indiana announced in the catalogue of 1881-1882 that: "Candidates for the Freshman Class, not members of a commissioned high school, may be examined by any county superintendent who holds a commission from the university for that purpose. In all such cases the questions are prepared by the university, and the answers are graded by the university." This plan differed from the one adopted in Illinois nine years before, in that, in the case of Illinois, the county superintendent read the papers and issued the certificate. Here the superintendent merely held the examination and transmitted the papers to the university.

1883

A matter of more than passing importance came before the Faculty of the University of Michigan, May 7, 1883, in the form of a committee report. Michigan had been admitting students from Michigan high schools on certificate for twelve years. The schools had prospered and the University was gaining in reputation. Naturally high school graduates of other states would be attracted to Ann Arbor. This happened and the question of admitting students from high schools of other states became pressing. A committee, composed of Charles Kendall Adams, Alexander Winchell, and Isaac H. Denmon, was appointed to consider the subject of admission of students. The whole matter seemed to hinge upon the visitation of schools outside the state. The committee decided that it did not seem practicable to attempt to visit schools in other states. It was then confronted with a dilemma. To refuse to admit students from other states on certificate would keep many away; to admit students on certificate from schools not visited would be a discrimination against the home schools. After making an analysis of the entire situation and after using in one paragraph the following language, "That the Diploma System has been of service in binding the schools of the state to the university, we have no doubt. That it has increased the number of our students, we

see no reason for believing," the committee recommended that certificates be accepted from high schools without visitation; and that the principal or superintendent signing a certificate should assume "the entire responsibility for the proper preparation of such student." The recommendation continued: "Students received on certificate will be regarded as on probation during the first semester, and any who may be found unqualified to go on with the class will be dropped." This report was made a special order of business; and although considered it was not disposed of until the next year.

"The propriety of classifying accepted schools" was considered by the University of Iowa this year. No action was reported, but the question will be of interest in a later discussion.

To understand the records of the Faculty of the University of Minnesota, henceforth, they must be placed alongside the minutes of the High School Board. It will be recalled that the University, in 1882, announced that after the close of that scholastic year the certificates of high school principals would no longer be received. The Catalogue for 1882-1883 contains the following declaration: "Certificates of the State High School Board are accepted and the holders are excused from examination in the studies named therein. No other certificates are now recognized." To understand the full significance of this statement it must be recalled that the President of the University was the examiner of the High School Board. Here the university shifts the responsibility of certification. The High School Board conducted regular set examinations in the schools and issued certificates in different branches to successful applicants. These were the certificates which the university proposed to accept for admission. While these examinations were conducted under the auspices of the High School Board they were probably little less than university examinations, since they were supervised by the President of the University.

1884

The Faculty of the University of Michigan, as previously noted, was considering the advisability of accrediting schools without visitation. The problem continued to be an important question through the first part of the year 1884.

The minutes do not give in full the solution of the question but it is evident that the visitation of schools was continued.

In 1884, the Board of Regents of the University of Texas, which institution had been opened the previous year without a preparatory department, felt the need of preparatory schools. At the June meeting, the Board of Regents took up the matter of establishing high schools which were to be "subsidiary to the university." After different meetings, and much discussion, the conclusion was reached that the establishment of such schools was "not within the powers of the Board of Regents of the University." The Board then turned to the State Board of Education, and after expressing the belief that "the greatest obstacle to a very large attendance (at the university) is to be found in the want of preparatory high schools throughout the state," recommended that new high schools be established and advised that such rules and regulations be made as to lead not only the new schools, to be established, but those already in existence to so adjust their courses as to prepare students for admission to the Freshman class. The recommendation closed with the words: "All high schools public and private which may conform to the system of the university should have the power to issue certificates of proficiency or graduation, which shall entitle the holder thereof to admission to all of the schools of the university without preliminary examination."

1885

The attitude toward the first high schools accredited by the University of Texas, in 1885, is suggested by the terms, "Subsidiary High Schools," and "Auxiliary Schools," by which they were designated.

The State Board of Education in Indiana issued a circular, which was published in the University Catalogue for 1884-1885, containing the statement: "Certificates of partial work, or even graduates from courses other than those preparatory for the university, cannot be accepted." Changes in superintendent, principal, or course of study were announced as sufficient reasons for withdrawing commissions. Schools were required to submit evidence, by January 1st of each year, that no such change had occurred.

1886

The High School Board of Minnesota, in 1886, arranged two courses of study for high schools, one of three years and one of four years. Schools having four-year courses were designated "High Schools of the first class." On February 13th, of the year named, the Faculty of the University voted to admit students on certificate from "first class" high schools as classified by the High School Board. The President "expressed strong disapproval, on the ground it would make an obnoxious discrimination between different high schools and would disparage the entrance examinations of the university."

While Iowa had considered the classification of high schools in 1883, no actual classification was recorded until 1886. In that year, in addition to the classification in Minnesota as already mentioned, Illinois divided her accredited schools into classes—those which admitted to all courses and those which admitted only to particular classes.

1887

The amount of time given to the discussion and affiliation of schools by the faculties of different universities will impress any one who happens to look through their minutes. In some cases the greatest care was shown in extending the privilege of certification. In the minutes of the Faculty of the University of Texas, for June 13, 1887, nine visits were reported and only four of the schools were accredited. While, no doubt, the schools were very weak, the percentage accepted seems small.

The University of Minnesota, April 7, 1887, voted to accept students on certificate from schools in other states providing the schools were accredited by their own state universities. This suggests the spread of the certificating system.

Michigan, this year, voted to affiliate some schools for periods of two and three years. The question of adding certain science subjects to the list to be accepted for entrance caused heated debates in the faculty.

Indiana decided not to commission a school without a graduating class.

The President of the University of Ohio complained to the Board of the method of dealing with accredited schools and

requested authority to visit the schools, which request was granted.

Wisconsin announced subjects, accepted as entrance requirements, in ten groups and gave to applicants some option in the selection of subjects to be presented for admission.

1888

The first joint meeting of high school representatives and university instructors for the purpose of constructive work was held, so far as the records show, at the University of Iowa, in 1888. Twenty superintendents, four principals, and fifteen university instructors were present. The conference adopted a course of study for the high schools of the state. In the circular announcing the course of study adopted the statement occurs that considerable liberty would be allowed to high schools in applying the course and that substitutions of real equivalents would be permitted "except in the requirements in Latin and mathematics."

The year 1888 brought a revision of entrance requirements at the University of Michigan. The committee which reported the proposed changes split on the foreign language requirements. Along with the change in entrance requirements it was proposed to issue a suggestive course of study for high schools. Some members of the faculty thought that one course should be made without any foreign language. The courses proposed are not found in the minutes and hence the results of the debate and final action are not recorded. These meager facts are introduced to show the tendencies of universities to meet high school conditions.

The University of Missouri, although one of the oldest in the Middle West, had a hard struggle to win popular favor. That institution was at times a subject of legislative criticism. While efforts were made by the Board and the Faculty to advertise the work and win the support of the people, a certain conservatism in dealing with the high schools was manifested. The President of the Board of Curators in his report to the Governor, in 1887, complained that no such articulation existed between the university and schools of the state as prevailed "in Michigan and elsewhere." For a partial explanation of the

situation, one need go no further than a resolution passed by the faculty, February 23, 1888. In response to requests of members of the State Teachers' Association, a committee of the faculty had met with a committee of teachers and some plans were made with a view to bringing the schools and the university into cooperation. The teachers were asking for a revision of entrance requirements and the faculty responded that their preparatory course was just what was needed and that the faculty would deprecate any change in the course, but that if the schools would take the preparatory course or any parts of it and carry them out the university would give credit for the work done. The head of each university school was given the power to accept or reject the work of any school. In short, the university did not meet the schools on a middle ground and failed to get on a good working basis with them until some years later.

The visitation of schools in Indiana has always devolved upon the State Board of Education, a condition which will receive later attention. The point of interest here is that, on October 22, 1888, the Board passed a rule providing that reports of visits to schools should be made in writing. This same year, the work of visitation was taken up by the faculty of the University of Ohio.

From the very beginning of certification by the University of Texas, the work of visitation was dealt with in a serious way. The conditions of the best schools in Texas, in 1888, were reflected in a report, recorded in the minutes of the faculty for the year just indicated, and made by a professor after visiting a school in the northeastern part of the state. The report on the course of study follows: "The course is even higher than is necessary for admission to the university and seems to be carried out very well. This extended high school course, which is pretty much the same in most of the schools of the state, while an evil as far as the university preparation is concerned (for which the same time devoted to a briefer course would be better), it seems to be almost a necessary one owing to the fact that so many students quit school for good after graduating from the high school, and so a tolerably full course is prescribed on their account." This suggests the old time academy course and not the high school course as it exists to-day.

1889

The following movements are recorded in the minutes of the different institutions, named, for 1889: Texas voted to make "Auxiliary Schools" centers for holding entrance examinations; the Missouri Faculty urged schools to teach Latin, Chemistry and Physics in order that preparatory work might be dropped at the university; Michigan dropped Arithmetic and Political Geography from the entrance requirements; the State Board of Indiana divided the state into districts for the purpose of visitation and assigned a district to each member of the board; and, the University of Indiana abolished the preparatory department.

Under date of January 7, 1889, the Wisconsin Faculty minutes show the following: "A circular letter from the President to principals of accredited schools was read showing relative standing of students admitted on certificate and on examination. The average standings were almost the same. There were more 'poor' and more 'excellent' (students) admitted on examination."

A factor, which has come to be of the most vital importance and which will be discussed later, was originated when an act of the Legislature of Wisconsin, approved April 16, 1889, provided that: "The State Superintendent is hereby authorized to appoint a person of suitable qualifications to assist him in visiting, inspecting and supervising the high schools of the state, and to aid in giving information and needed assistance to local free high schools where no graded schools exist."

1890

While the different faculties took steps, in 1890, of more or less importance in developing their certification systems, only two institutions will be mentioned.

The Faculty of the University of Texas, March 10, 1890, passed the following: "Ordered that hereafter no high school shall be affiliated in which the teaching of Latin is not conducted under a competent teacher with a course of suitable dignity and for a minimum of three hours a week throughout the high school course." This order was never carried out and for some years schools were accredited in as few as two subjects. The order as passed by the Board of Regents, June 17, following,

contains the additional statement that while the Latin must be taught it will not be made necessary for graduation from a high school. The quotation is given to indicate an attitude which was doubtless somewhat general at that time. There was some tendency, as noted in Missouri and Texas, to force ancient languages, especially Latin, upon the schools.

At the same meeting at which the resolution concerning Latin was passed, the Board of Regents referred to the employment of a special inspector of schools, but lack of funds seemed to be the impediment in the way of any definite action.

In some institutions, in 1890, no attempt was made to go behind the mere statement of some school authority that an applicant was a graduate of a high school and was entitled to enter the university on his diploma. Other institutions required still more knowledge concerning the actual preparation of prospective students. A more careful way of dealing with the certificate was suggested by the President of the University of Ohio in his annual report to the Board of Trustees for the year 1890. He stated: "Under these provisions, 76 certificates were presented at, or shortly before, the opening of the present year. Many of these were accepted only in part. Some were deficient in the amount of work, and some in the quality. Of those deficient in the amount of work, some were deficient because the textbook used was too brief or too elementary, and others, because the time devoted to the subject was too short; and still others because the grade of the candidate was too low." Concerning the method of admission the President is not sure; but he states that if properly administered he sees no reason why "the plan will not insure a good preparation of the candidate admitted under it."

Third Decade of Certification

1891

The expense of visiting schools in some states was borne by the universities and in others by the schools. The latter method prevailed in Michigan for twenty years. A very difficult problem was involved. In some states as the system became developed, schools were dropped automatically when they changed superintendents, principals, or courses of study. It

was then necessary for them to make application for re-examination and re-affiliation. Sometimes schools would not be accepted on the first visit and would be required to pay for others. With such conditions a certain amount of friction was inevitable. On March 30, 1891, the Faculty of the University of Michigan "moved and carried a committee be raised to memorialize the Regents on paying the expenses of the committee visiting schools."

In connection with visitation, Texas presented a new feature. Not only were applications being received from other states, but the minutes of the faculty show that special effort was made to get in touch with some of the best private preparatory schools of the South.

This was probably a result of the fact that Texas had comparatively few preparatory schools and many Texas boys and girls went to the older states for college preparation. The University doubtless desired to recall such students for collegiate work at home; and, so, desired to get in touch with the schools which were preparing Texas young people for college. The faculty soon encountered the problem of visiting schools outside the state. On December 16, 1891, it was voted to empower a local committee in Ft. Smith, Arkansas, to visit the high school of that place, providing that the school be visited without expense to the University. It does not seem, however, that the plan of using local committees was ever developed to any considerable extent.

Iowa announced a revised scheme for admission by certificate, March 11, 1891. In the new plan the expenses of visiting the schools were to be assumed by the University.

The need of closer touch with the high schools began to be deeply felt by the University of Missouri. The Catalogue for 1890-1891 contains several paragraphs concerning "articulation." The following excerpts are quoted from that discussion: "It is equally evident that the University is too much isolated from the lower schools. It seems to stand alone in the State. . . . There is no organic influence impelling public attention or even encouraging public patronage. The public schools receive support from an endowment equal to ten million dollars. Yet they are legal strangers to the University. There is a great

chasm between them." Then follows a plea for legal enactment which would bind the schools and the University together. This was a wail of despair which ultimately brought salvation to the University of Missouri. This very year, three preparatory courses were announced. Some years had to pass, however, before the admirable conditions ahead were fully realized.

The catalogue of the University of Wisconsin, 1890-1891, contains a statement which represents somewhat the same feeling expressed in the last paragraph: "It is also proposed to bring the university into more formal and official relationship with the state school system. To do this the four high-school courses recently revised and recommended by the state superintendent have been adopted as standards or types of the preparatory work required for admission to the corresponding courses of the university." A disposition was thus shown to meet the schools on their own ground.

The following statement taken from the catalogue of the University of Indiana, for the year under consideration, shows further the disposition to connect the high schools with the universities: "None of the work of the high schools, or of other parts of the public school system is now duplicated in the university. As its instruction begins where the work of the high school leaves off, its lowest class is composed of those who have successfully completed the course of the high school, or a fair equivalent."

1892

The minutes of 1892 show little except routine work concerning the accrediting of schools.

1893

In 1893, the Legislature of Missouri abolished the preparatory department. The step followed after years of agitation. It was claimed, in 1885, that mere children were attending the university, and the Legislature considered the question of abolishing the preparatory department at that time. An investigation showed that the average age of the students in attendance at that time was 20 years and 1 month. The schools of the state had worked for some time to get the preparatory work cut down.

The faculty thought that the preparatory department was necessary. Finally the matter was settled by the Legislature as stated.

The work of visiting the schools had become so heavy that Michigan found it necessary this year to continue a list of schools for a period of three years without visitation.

Minnesota claimed that the students entering on certificate from the high schools were not well prepared for college work. A regulation was passed providing that important subjects not taken in the high schools should be made up in the University. Since 1886, students had been admitted from "First Class" high schools, as classified by the High School Board; and for some reason the university did not keep in as close touch with the schools as formerly. In 1893, steps were taken to protect the standards of entrance as already indicated.

The President of the University of Minnesota as a member of the High School Board had acted as inspector of schools since the board was organized in 1881. The board, June 29, 1893, elected an inspector of schools who was not to be connected with the university but who was to give all of his time to high school inspection. That step broke one vital connection between the schools and the University of Minnesota.

1894

The length of time for which schools had been accredited previous to 1894 varied from the time of a change in school management, or change in course of study, to the indefinite time indicated by some such expression as "until the work of the school is found unsatisfactory." Illinois thought best this year to cut the period for which a school could be affiliated from five to three years. The time for which a certificate could be presented after graduation was changed from twenty-eight to sixteen months. This same year, Texas repealed the law limiting the life of a certificate to one year and passed no other rule. Judgments concerning the life of a certificate and the period for which a school should be accredited were thus shown to be in an unsettled state.

Michigan appointed a committee this year to confer with a committee of the state teachers' association, at the request of the latter, with reference to entrance requirements.

1895

The lack of preparation of students entering on certificate was discussed by the Board of Visitors of the University of Wisconsin in a report submitted June 18, 1895. The discussion includes eight paragraphs and closes with the recommendation that applicants be required to bring with them the examination papers on which they graduated. The board, here mentioned, was not a board of inspectors but a body whose duty it was to keep watch over the general administration of the university. The report of this board was doubtless influenced in some measure by the faculty.

The inspection of high schools and the examination of students were made a part of the duties of the professor of education by the regents of the University of Iowa, March 12, 1895. Comparatively little visiting was done for the next four or five years, as shown by the records.

Michigan, Missouri, Iowa, and Illinois all made important changes in entrance requirements this year. Iowa announced subjects in groups, Illinois made some subjects "fixed" and some "elective," Missouri used the term "units," and the Michigan faculty recommended to the Board of Regents that entrance requirements be raised.

1896

All of the nine records show significant steps directly or indirectly connected with certification in 1896. Minnesota had elected a special inspector of schools, in 1893, who was to serve under the High School Board; Iowa provided, in 1895, that the inspection of accredited schools should be looked after by the professor of education; Illinois and Missouri advanced a step by placing the inspection of schools under special examiners, these examiners to have membership in the university faculties. In recommending the appointment of a "Visitor of High Schools" to the Board of Trustees, June 9, 1896, the President of the University of Illinois used the following language: "The time has now come when it seems imperatively necessary that the university should employ a man whose special duty it shall be to visit high schools with a view to placing them, or continuing them, upon the accredited list of the university. The work has heretofore been done by members of the faculty and always

with more or less inconvenience to their regular university work, as well as without the best results upon the field. When the examinations of high schools are made by different members of the faculty, of course, there is an inevitable variety of judgment exercised in determining their status. I am confident that it would be very greatly to the advantage of university work, that it would promote the best relations between the university and the high schools, and that it would have a stimulating and helpful effect upon the high school work throughout the state, if we could have the right man, whose time should be exclusively devoted to that important interest." This quotation sets forth some of the reasons advanced for the appointment of special inspectors of schools.

Minnesota found it necessary to limit the acceptance of certificates to graduates of high schools having four-year courses.

Texas ordered a classified list of schools to be prepared for the catalogue. A reactionary spirit was shown in the report of a committee recommending that those who expected to graduate should be required to pass entrance examinations. The recommendation, however, was not accepted by the faculty. The life of the certificate was limited to one year.

The University of Ohio, in 1896, was making an attempt to get rid of preparatory work. The President, in his annual report, used the following words: "Every preparatory department maintained by a college or university is a direct thrust at every high school and academy."

By 1896, the University of Wisconsin was getting to work in earnest on the development of the system. On January 21st, the President reported: "Experience has shown that this method of admission can only be made satisfactory by a system of frequent and somewhat thorough examination of the schools." The method of procedure in accrediting schools was as follows: (1) Application from the school; (2) school visited; (3) written report made to committee on accredited schools; (4) recommendation to the faculty; (5) faculty action; and (6) action of faculty communicated to the school.

This year the Indiana Board of Education reiterated the rule requiring written reports on schools.

Iowa was working slowly on a classification of schools; and

Michigan made an announcement of subjects, required for entrance, in groups.

1897

The universities were, about this time, in the midst of transition in methods of announcing entrance requirements. In 1897, Minnesota announced in "year-credits"; Michigan, in "Groups"; Missouri, in "Units."

In the catalogue of Missouri University for the next year, the statement was made that the new entrance requirements had been criticised but that they were approved "by the State Teachers' Association representing the entire state."

The change in the announcement of entrance requirements represented, possibly better than any other factor, the *bona fide* adjustment of college requirements to high school conditions.

1898

Early in 1898, the Faculty of the University of Michigan passed two suggestive resolutions, one requiring "that the Diploma Schools Committee report at least once a year to the faculty the results of their transactions," the other providing for the appointment of a committee "to take into consideration the subject of the present system of inspecting schools to see whether a better system cannot be devised." Both of these resolutions suggest unrest. The first of these movements exhibits a disposition on the part of the faculty to keep in touch with the work of accrediting schools. That work had largely passed to a special committee. One of the largest problems encountered in accrediting schools has been the proper lodgment of authority. The second resolution suggests the need of more efficient inspection and led the next year to the appointment of a special inspector.

The University of Minnesota, June 1, 1898, voted to require eight credits in the form of certificates of the High School Board, the remainder of the credits to be accepted on certificate from the schools. To understand this resolution it is necessary to recall that certificates of the High School Board were based upon set examinations. It does not seem that this resolution was put into operation; had such been the case, the university

would practically have returned to the examination system for about one-half of its entrance credits.

Previous to 1898, the records were silent with reference to any joint plan of accrediting schools to be used by the different colleges within any given state or territory. Under the date of May 27, of that year, the University of Iowa provided that a plan should be proposed to a committee of the college section of the State Teachers' Association. The results of the proposal are not recorded and the matter is presented merely because it brings up the idea of state organization of colleges as a unit of control for certification.

1899

High Schools in Minnesota, under the supervision of the High School Board, receive certain apportionments of state funds. Certain public schools, not wishing to avail themselves of the state money because of provisions of the high school law which make it a disadvantage to do so, and private schools are not under the regulations of the High School Board. In 1899, the university took up the matter of crediting the independent schools and has since continued the work. Missouri, by 1899, enjoyed a much better state of cooperation between the schools and the university. In the catalogue of that year the following expressions occur: "The University has done much to foster the marvelous growth which has taken place in secondary schools in the state in the last three years." The statement is made that, in 1895, there were 9500 pupils in high schools, and in 1898 the number had increased to 20,000. The statement continues: "We have already begun to reap the benefits of this growth in the secondary schools. The Freshman class entering in September, 1898, was the largest and best in the history of the university, for most of the students came from approved schools."

It is probable that no stronger testimony to the practical results of cooperation between secondary and higher education can be found than is shown in the records of the University of Missouri about this time.

1900

Last year, Michigan gave the visitation of schools into the hands of a single person; this year, Wisconsin and Iowa ap-

pointed special inspectors who were to give their entire time to the work. Because of lack of funds, inspection of schools by the State Board of Education in Indiana was suspended until the legislature should provide funds. The legislature made provision and visitation was resumed the next year.

Missouri announced in the catalogue for 1899-1900 that diplomas would not be accepted as credentials but that certificates stating the exact preparation of each student would be required. The further statement was made that applicants who were not graduates might present the grades received on examinations, taken in the schools, but that the acceptance of such grades would be left to the individual professor interested.

Fourth Decade of the Certifying System

1901

After 1900, few new policies are found in the records. The development of the systems already in operation largely engages the attention of inspectors, committees on accredited schools, and faculties. The final authority for passing upon the schools is transferred more and more from faculties to committees and inspectors; and so, the minutes of governing boards and faculties contain fewer references to accredited schools and the certification of students. The records of committees and inspectors deal largely with details concerning the schools; and, since the principal methods, used by typical institutions, will be discussed later, it does not seem profitable to trace the changes from year to year. Only the more important developments will be noticed.

In 1901, a movement was started by the University of Minnesota to have all applicants examined in English which plan was later adopted. Wisconsin considered the feasibility of announcing entrance requirements in "units" but decided not to do so until the requirements were further simplified by the faculty. The entrance requirements announced by Texas this year provided a handicap on students not offering Latin, the requirement to take effect the following year.

1902

Since 1887, the rules governing the affiliation of schools by the University of Ohio had provided that schools should be

visited by "a committee of two" from the faculty; in 1902, a special inspector of schools was appointed.

At a meeting of the Board of Education of Indiana, May 14, 1902, a committee was appointed to consider the advisability of appointing a high school inspector to do the work carried on for years by the different members of the Board; no practical results followed, and the Board continued to visit the schools.

1903

A somewhat general feeling of different institutions, concerning admission by certificate, was expressed by the President of the University of Ohio in his annual report to the Board of Trustees, June 30, 1903: "Experience for the past five years has proved beyond controversy that students may not be enrolled safely upon such reports as are possible from schools." This statement occurs in connection with a report on the work done by the high school visitor for the preceding year.

1904

The examination of all students in English on entrance, suggested by the University of Minnesota three years before, was made a requirement in 1904, and the supervision of the examination was assigned to the department of rhetoric.

The infrequency with which schools were dropped from the accredited list, according to the records, is only surpassed by the infrequency of withdrawals on the part of the schools themselves. In 1896, the records of the University of Wisconsin show that there was some criticism in some cases where schools were dropped from the accredited list. While a few schools were dropped in the different states from time to time, the only case of a withdrawal encountered in the records thus far, on the part of a school itself, occurred in Texas in 1904. It is not claimed that this was the first or only withdrawal of this kind but that withdrawals were extremely rare.

1905

Various officers have been assigned to deal with the matter of checking in the certificates, presented, at different institutions. In some institutions, the registrars have had control; in

others the deans of academic departments; in the University of Michigan, the deans of the several departments act independently of each other. In 1905, the University of Ohio created an Entrance Board which has charge of the admission of all students.

1906

There was noticeable, about this time, a great effort in different institutions to raise entrance requirements. The advancement was entirely natural and justifiable. The high schools were becoming stronger and more numerous. The standards of entrance requirements, undoubtedly, were lowered when the colleges first did away with preparatory departments and began to depend upon the high schools for the preparation of students. The schools were weak and the colleges were compelled to meet their conditions, and the result was a lowering of standards of admission. But the colleges soon began to raise requirements and thus pull up the schools. The changes in the records examined support these statements. The establishment of the Carnegie Foundation for the Advancement of Teaching, in 1905, gave an impetus to the advancement of entrance requirements already begun years before. That influence began to be felt by 1906.

1907

From time to time, the different institutions, in order to secure choice students from the accredited schools, provided scholarships, usually if not always, for the high school pupils standing highest in their graduating classes. As early as 1886 Indiana provided "honor scholarships." In 1907, the University of Texas provided two scholarships annually for each school, one for the boy and one for the girl standing highest in their class. In case a class should be composed of one sex, but one scholarship would be awarded.

1908

The lack of preparation on the part of certificated students became so impressed on the Faculty of the University of Minnesota that, in 1907, it voted that "it was in favor of the general idea of having some examinations for admission." A committee

was appointed to take up the matter and report to the faculty later. The resolution referred to was passed in March; and in May following, it was decided to request more definite information from the schools concerning subjects offered, strength of applicants and other "pertinent remarks." On June 8, "it was voted that the principals of accredited schools be notified when pupils of their schools receive conditions here at the university." This unsettled condition continued and in March, 1908, fifty-two students were dropped for falling down in 60 per cent of their work. Out of this action arose a different plan for dealing with high school graduates. The officials of the schools were requested to divide the graduates into three groups according to proficiency: "Pass," "Pass with Credit," and "Pass with honor." Only those in the two highest classes were to be accepted without examination. Later it was planned to send a printed list of the students dropped for delinquency in work to the instructors in the university, to the state inspector of high schools, and to the head of the crediting school. It was further proposed to send a list of schools with the numbers dropped from each school to all of the city superintendents and the heads of accredited schools. In the plans announced are to be found two fundamental ideas. In the first place this method would throw back upon the schools the responsibility of selecting those of their graduates who should enter college; the other suggestion deals with the idea of giving wide publication to the failures of the certificated students. These same plans, in different forms, have been used or suggested by other institutions.

1909

After thirty-eight years of work with the schools, the University of Michigan proposed in a bill, approved by the faculty, January 26, 1909, and by the Board of Regents February 17, of the same year, to place the schools under the control of a "State High School Commission" to be composed of the President of the State University, the State Superintendent of Public Instruction and the President of the State Agricultural College. The bill provided for the appointment of three inspectors, at least one of whom should "be a member of the faculty of the department of Literature, Science and the Arts of the Univer-

sity of Michigan." In a revision of the bill the last clause was eliminated.

On January 6, 1909, the State Board of Indiana recommended to the legislature the creation of the office of "Inspector of accredited normal schools and certified high schools." It should be noted that "certified high schools" in Indiana are not the same as "commissioned high schools." Only the latter may send students to the University on certificate.

1910

Closing the records of the office, the inspector of schools for the University of Iowa wrote: "On March 2, 1910, the State Board of Education removed inspection from the university and from the state college, and appointed the inspector of schools for the university inspector of secondary schools for the board, removing him from the faculty of the College of Liberal Arts in the university. This, therefore, closes this chapter." The action, here recorded, was the culmination of a strife which had prevailed among educational leaders and interests for some years. The removal of inspection from the university, as was done in Minnesota in 1893, broke one of its vital connections with the schools of the state.

Probably the fiercest conflict recorded over the question of high school inspection is found in the minutes of the University of Wisconsin. For some years the State Department of Education had waged war on inspection of schools by the State University. On October 12, 1910, a resolution was introduced in the Board of Regents providing that inspection of schools by the university should be abolished. The resolution did not come to a vote in the Board. The matter had been before the State Legislature in 1909 and was presented again in 1911, but no law was passed on the subject.

At the close of the first forty years of admission to college by certificate, conditions were extremely unsettled. The system, in some form or to some degree, had spread to all but a half dozen colleges in the United States. It had grown in response to popular demands.

The efficiency of the system at the close of this period seems far from what should be and is desired. Lack of close in-

spection of schools is found in every state. Strife between state departments of education and state universities is present in some states where cooperation should prevail. Normal schools and denominational colleges, in some states, claim that the state universities manipulate the inspection of high schools in their own behalf ; while the universities report that jealousy and selfish interests incite the opposition to their claims. This agitation is shown in the tendency to remove high school inspection from the control of the state universities. Other movements along this line will be cited in the chapter on present conditions. The records of faculties reflect more or less dissatisfaction with the preparation of entering students. There is also a disposition on the part of some institutions to disown responsibility to the schools. Instead of aiding in the proper preparation of students, some institutions are disposed to become their own clearing houses, admitting without question all who apply and having sifted the good from the bad, in the first few months, eliminate or carry as dead weight the unprepared.

So far in this chapter the purpose has been to set forth conditions as they are found in the records. An attempt will be made to interpret the facts submitted after a more specific study is made of present day conditions.

TABLE X
DATA CONCERNING CERTIFICATION IN NINE STATE UNIVERSITIES

No.	State	System Adopted	Prepara- tory Depart- ment Abolished	Special Inspector Appointed	Admitted by "Credits" or "Units"
1	Michigan	1871	1848	1899	1901
2	Minnesota	1886	1889	....	1897
3	Missouri	1888	1894	1896	1895
4	Illinois	1877	1911	1896	1899
5	Indiana	1873	1889	....	1898
6	Iowa	1876	1879	1895	1900
7	Ohio	1880	1898	1902	1901
8	Texas	1885	....	1905	1901
9	Wisconsin	1876	1880	1900	1904

Observations Based on Table X

Table X taken as a series of dates means little; considered as a skeleton of movements it may suggest much. An explanation concerning the sources and reliability of the facts may save misunderstandings. The order in which sources have been rated may be stated as follows: (1) Minutes of governing boards; (2) Minutes of faculties; (3) Announcements in catalogues. In all cases an attempt has been made to check each of these sources with the other two. In some cases checks were impossible; in other cases none of the sources were definite and the exact dates of action could only be approximated. The dates used are the ones on which practical work was begun. To illustrate: The Iowa Board of Regents passed a resolution providing for certification in 1872, but no practical results followed until 1876, when the resolution was reiterated and work was commenced. The dates given for the appointment of special inspectors are the years when some one single member of the faculty was made responsible for the work of visitation, whether that person was to give all or only a part of his time to school inspection. The exact dates of the abolishment of preparatory departments were found to be elusive. Announcements would occur that preparatory work would be discontinued at a certain time, but the catalogues would show the enrollment of preparatory students for some years thereafter. The date was taken on which the actual suspension of preparatory work seemed to

occur. The dates given for the changes to the "unit" or "credit" system were taken from the catalogues and may vary a year from the actual dates on which the changes took place. However, not one of the seeming discrepancies affects the practical use of the table.

The adoption of the system in the nine states had a spread of eighteen years. Six of the states had taken up certification by 1880. Texas had not yet organized her university. References in the resolutions show that Michigan influenced other states; and yet in each case local conditions played the greater part. Complete lack of knowledge of what had been done in other states seemed evident in many cases.

When the University of Texas was organized, the Board of Regents spent some months in considering plans for organizing branches which should be parts of the university; no reference is made to the unsuccessful experience of Michigan or the contemplated plan of Missouri forty years or more before. The general idea of a connection between the higher and lower institutions was the same in the different states, but each state largely worked out its own plan of application.

With the introduction of the certificating system was coupled the idea of the abolition of preparatory departments from the universities. A comparison of the figures in column one with those in column two will show that in four cases the elimination of preparatory departments followed soon after the adoption of certification. One university never had a preparatory department and one had abolished preparatory work before introducing the new system. The institutions not dropping their preparatory departments were repeatedly requested to do so by the schools and their failure to comply in each case seemed to act as an impediment.

The records disclose clearly that the adoption of the system of certification meant the establishment of a line between preparatory and collegiate institutions. Forty years have been spent in working upon the adjustment of that line. The elimination of preparatory departments from the higher institutions was demanded. In some cases a struggle ensued, but with one result—the separation and more distinct characterization of the

two fields of work. Who will say that in this particular a great service has not been rendered?

The new system broke down university walls and led members of the faculties into the schools. Heretofore faculties had stood at their doors and received those who presented themselves. According to the new plan the determination of entrance requirements was to be transferred to outside control. It was essential that personal contact should be made with the schools. The novelty of school visitation, personal enthusiasm of certain members of the faculties (sometimes selfish and sometimes patriotic), the small numbers of accredited schools to be visited, and a real desire to bring college instructors and high school teachers together, were some of the elements which controlled visitation in some of the states, for thirty years, and prevented the appointment of special inspectors. As schools increased in numbers and the systems of accrediting schools became more complex, one institution after another placed the visitation and inspection of schools in the hands of one person. The table shows that this movement was more nearly simultaneous in the different states than the adoption of the certifying system or the abolition of preparatory departments.

Column four in the table relates to one of the most important steps in the entire evolution of the system. For twenty years or more after Michigan began to admit students on certificate definite entrance requirements were announced for each of the separate college courses. It is true that the requirements for the several courses differed but there were few substitutions allowed. From year to year the universities announced new courses, until, by 1890, as many as nine different courses appeared in one of the catalogues. Special requirements were announced for each of these courses. The schools, at first, were accredited to certain courses and not to others. Soon there was a clamoring for more liberal entrance requirements and the colleges were becoming more and more embarrassed. The first step taken to meet the conditions was to announce the subjects accepted as entrance requirements in "groups." Certain groups were required for certain courses with some liberty of substitution. The "group" stage in the development was rather short, and, as is shown in the table, in the years clustering about 1900, there was a change

to the "unit" or "credit" system. These different changes meant that an effort was being made to adjust entrance requirements to changing conditions and high school needs. A further study of changes in entrance requirements will be made in Table XI.

TABLE XI

DATES OF FIRST REQUIREMENT OR ACCEPTANCE OF SUBJECTS FOR
ADMISSION BY NINE STATE UNIVERSITIES, 1870-1910

Subjects	Mich.	Minn.	Mo.	Ill.	Ind.	Ia.	O.	Tex.	Wis.
1. Agriculture.....			1906	1909			1907	1910	
2. Algebra.....	1870	1876	1870	1870	1870	1870	1880	1883	1870
3. Astronomy.....	1891	1876		1893		1876	1894		1894
4. Arithmetic.....	1870	1876	1870	1870	1870	1870	1880	1883	1870
5. Biology.....	1891		1894	1899			1907		
6. Botany.....	1873	1876	1888	1873	1891	1870	1880	1902	1875
7. Book-keeping.....		1908	1880	1876	1874	1805		1910	
8. Chemistry.....	1870	1880	1888	1893	1891	1870	1896	1902	1904
9. Civics.....	1879	1900	1889	1899	1885	1879	1888	1907	1872
10. Com. Subjects.....		1904		1906					1907
11. Drawing.....	1872	1876	1889	1896		1879	1907	1904	1904
12. Domestic Ec.....		1908	1910	1909			1907	1910	
13. English.....	1870	1876	1870	1870	1870	1870	1880	1883	1870
14. Economics.....		1900	1910	1909		1889			1904
15. French.....	1872	1895	1874	1878	1886	1875	1893	1892	1887
16. Geometry, Plane.....	1870	1876	1873	1873	1875	1870	1880	1883	1870
17. Geometry, Solid.....	1870	1888	1883	1894	1897	1886	1880	1907	1882
18. German.....	1878	1876	1873	1878	1886	1870	1880	1892	1875
19. Geography.....	1870	1876	1870	1870	1870	1872	1880		1870
20. Geology.....	1873	1876		1899	1894	1879	1894		1871
21. Greek.....	1870	1876	1870	1871	1870	1891	1896	1883	1870
22. History.....	1870	1876	1870	1870		1872	1880	1887	1870
23. Latin.....	1870	1876	1870	1870	1870	1870	1880	1883	1870
24. Manual Training.....	1904	1901	1905	1899			1907	1904	1904
25. Physics.....	1873	1876	1880	1873	1891	1870	1880	1902	1874
26. Physiography.....	1891	1876	1880	1893		1877	1880	1902	1870
27. Physiology.....	1879	1876	1880	1873	1875	1876	1880	1902	1874
28. Spanish.....		1902	1904				1902	1897	1907
29. Sten. & Twp.....		1906						1910	
30. Trigonometry.....	1891		1903			1886	1880	1907	1905
31. Zoology.....	1873	1897	1887	1893	1891	1879	1902	1909	1894
32. Miscellaneous.....		1906 ¹	1910 ²		1899 ³			1904 ⁴	1893 ⁵

¹ Scandinavian. ² Music. ³ Five units of any subject taught in a good high school.
⁴ Field work. ⁵ Mental science and art of teaching accepted.

Observations Based on Table XI

In the administration of any system of admission to college the first consideration is the selection of the preparation to be required or accepted. The early colleges limited their entrance requirements to a few subjects. Within the last forty years as many subjects have been approved for college admission. It is claimed in this study that admission by certificate has greatly broadened the work both in the colleges and in the high schools. Furthermore, with few exceptions, this broadening of work in the schools has been largely simultaneous with the expansion in the universities; especially does this hold with reference to schools and colleges using the certificating system of admission.

Much has been said concerning the domination of the high school curriculum, comparatively little has been written of the domination of the college by the high school. Where admission to college by examination alone has prevailed, no doubt the preparatory schools were controlled in the selection of subjects to be taught, in a great measure, by the demands of the colleges; but where the certificating system has been used there has been a growing tendency to adjust college requirements to high school conditions. So strong has been this disposition in some states that the schools have gained control and now practically dictate college entrance requirements.

Table XI presents the subjects required or accepted by nine institutions with the dates on which the subjects appeared in the catalogues. A few words of explanation should be made concerning the data. Some of the institutions, studied, were nothing more than preparatory schools in 1870 and did not make definite announcements of entrance requirements to collegiate departments until some years later. Some of the institutions announced merely that students would be admitted who had completed the branches taught in the elementary schools. In some cases the data given were taken from the preparatory courses announced by the different institutions. It is believed that the subjects named and the dates given, subject to slight errors due to indefiniteness of the sources, represent a fair background upon which a study of the changes in state university entrance requirements may be based.

A critical study of the changes of content of each one of the subjects named in the table reveals many interesting points. Indeed the table is nothing more than a mere skeleton to which the vital parts may be attached. Only somewhat general statements concerning changes in content will be made.

Some subjects, as Astronomy, Greek, and Geology, gradually lost popularity until they were practically eliminated from the lists of subjects offered. Arithmetic and Geography, as announced forty years ago, drifted out by 1890, except in two or three institutions, and appeared later in new forms. The General Arithmetic changed to Commercial Arithmetic, and the Geography was later taken up with History or drifted to an accentuation of the physical side and appeared as Physiography.

Physiography also took up phases of the old Geology. Certain other subjects, as Mechanical Drawing and Bookkeeping, were dropped for a time and later reclaimed a place in the high school curriculum. History first appeared as United States History or Ancient History; later it changed to General History, and at the close of the period appeared as Ancient History, Mediaeval and Modern History, English History and American History. These exact divisions, however, have not been observed by all of the institutions. The evolution of the subject of English, as shown in the announcements of entrance requirements, is striking. At first, Grammar and "Sentential Analysis," later the addition of Rhetoric and Literature and finally the stress upon expression, or composition writing, were some of the steps clearly marked from year to year. Starting with Latin, Greek, Mathematics, a little English and a little History, admission subjects advanced to include the Modern Languages, the Sciences and finally, in some institutions, the vocational subjects, as shown in the Table. To appreciate the changes made in entrance subjects not only the numbers but the content and methods of teaching should be considered. The announcements show urgent petitions to the schools to change from memoriter systems to experimentation. Laboratories and libraries did not at first grow up in schools but in universities. The better methods of teaching were at first urged upon the schools by the colleges; but not until the schools and the colleges were brought into vital relation through a direct and immediate common interest in the preparation of students. This inter-relation and cooperation will be further discussed in connection with the following tables.

TABLE XII
SUBJECTS ACCEPTED FOR ENTRANCE BY NINE STATE UNIVERSITIES
DISTRIBUTED BY DECADES¹

State	1870	1880	1890	1900	1910
1. Michigan..	Al., Ar., E., P. G., S.G., Geog., Gr., H., L.	B., C., Civ., D., F., G., Ge., P., Phys., Z.		Ast., Bi., Ph., T.	M.T.
2. Minnesota.	Entrance Re- quirements Announced, 1876	Al., Ast., Ar., B., C., D., E., G.P., G., Geog., Ge., Gr., H., L., P., Ph., Phys.	G.S.	Civ., Ec., F., Z.	Bk., C.S., D.E., M.T., S. S. and T., Scan.
3. Missouri...	Al., Ar., E., Geog., Gr., H., L.	Bk., F., G.P., G., P.	B., C., Civ., D., G.S., P., Phys.	Bi., Z.	Ag., D.E., Ec., M.T., S., T., M.
4. Illinois....	Al., Ar., E., Geog., H.	B., Bk., F., G.P., G., Gr., L., P., Phys.		Ast., Bi., C., Civ., D., G.S., Ge., M.T., Ph., Z.	Ag., C.S., D. E., Ec.
5. Indiana ...	Al., Ar., E., Geog., Gr., L.	Bk., G.P., Phys.	Civ., F., G.	B., C., G.S., Ge., P., Z.	5 units, elec- tive, from any high school subjects
6. Iowa	Al., Ar., B., C., E., G.P., G., L., P.	Ast., Civ., D., F., Geog., Ge., H., Ph., Phys., Z.	Ec., G.S., T.	Bk., Gr.	
7. Ohio.....	Common School branches, 1873	Al., Ar., B., E., G.P., G.S., G., Geog., H., L., P., Ph., Phys., T.	Civ.	C., F., Ge., Gr., Ast.	Ag., Bi., D., D.E., M.T., S., Z.
8. Texas.....		Organized, 1883	Al., Ar., E., G.P., Gr., H., L.	F., G., S.	Ag., B., Bk., C., Civ., D., D. E., S.G., M.T., P., Ph., Phys., S. and T., T., Z., F.W.
9. Wisconsin.	Al., Ar., E., G.P., Geog., Gr., H., L., Ph.	B., Civ., G., Ge., P., Phys.	F., G.S.	Ast., Z., M.S., A. of T.	C., C.S., D., Ec., M.T., S., T.

¹ The subjects added within each preceding decade are given under the dates 1880, 1890, 1900 and 1910.

Observations Based on Table XII

Table XII, compiled from Table XI, enables us to make further observations concerning subjects admitted for entrance requirements between 1870 and 1910. The question of college domination of high school courses and the more recent claim of high school control of college entrance requirements may be studied by the use of this table. If it can be shown that the colleges accredited schools and then refused to accept for admis-

sion subjects which were well taught in the schools, but that they continued to exact the old standard subjects of Greek, Latin, and Mathematics alone, then it would seem that such requirements would militate against the free development of the high school curriculum. Or, if the colleges stood aloof from the schools, refused to cooperate with them, and still kept hard and fixed entrance requirements, the influence of the higher institutions would still tend to oppose the expansion of high school courses. The table will be used, more especially, in discussing the so-called oppression of the schools by the colleges.

In Table X, it may be seen that Michigan, Illinois, Indiana, Iowa, and Wisconsin were all admitting on certificate by 1880. Table XII shows what subjects were recognized by these institutions for admission requirements. Of the modern subjects, Michigan recognized two modern languages and six sciences; Illinois, two modern languages and three sciences; Iowa, two modern languages and eight sciences; and Wisconsin, one modern language and five sciences. In Indiana the State Board of Education determined upon the schools to be accredited and the university accepted certificates from the schools almost without question. While Minnesota did not accept students on certificate until 1886, for ten years it had numbered among its entrance requirements, French, German, Botany, Chemistry, Geology, Physics, Physiology, and Zoology. Ohio began to admit students on certificate from towns having a population of five thousand people and, although it had been admitting students directly from the elementary schools, its entrance requirements to collegiate work included German, Botany, Physics, Physiography, and Physiology. Texas began to affiliate schools in 1885; and, while students were admitted who could make any showing of fitness whatever, the records show that, at one time, the Faculty voted not to accredit schools not providing for the teaching of Latin. As shown in the table, Texas did not accredit schools in modern languages until after 1890 and not in sciences until after 1900. Missouri began to credit schools in 1888 but for some years it had been preparing students in two modern languages. The sciences were recognized about the time schools were first accredited. These facts show that with one or two exceptions these nine institutions were ready to credit the modern subjects

when they began to admit students on certificate. It seems quite probable that lack of adequately trained teachers and the absence of laboratory equipment in the schools played a greater part, for many years, in keeping back the development of the high school curriculum than did the opposition of the colleges. It is not claimed that a conservatism toward the admission of new subjects did not prevail in faculties, but that the table shows that such influence did not dominate. The minutes of the faculties record that contests over the admission of new subjects occurred but that the more liberal views prevailed. The most potent factor, as shown by the records, in deciding the inclusion of new subjects from time to time was the desire to adjust the entrance requirements to high school conditions.

The discussion so far has pertained to the admission of the modern languages and the sciences. It may be asked, what about the recognition of the vocational subjects? A glance at Table XII will reveal the fact that, with the exceptions of Texas and Illinois which were just being organized as colleges, the two columns, representing a period of twenty years, show very few additions to the lists of subjects admitting to college. The colleges ran ahead of the schools with the modern languages and sciences; the schools were the leaders in the demand for the recognition of the vocational subjects. Only four of the nine institutions were crediting Agriculture, five, Domestic Science, and seven were recognizing Manual Training in 1910. The colleges, doubtless, argued correctly that the work was poorly done; but they did little or nothing to improve it until forced to do so or lose students who were otherwise well trained. Once compelled to recognize these new subjects, the colleges became determined that they should be well taught. The co-operation of the schools and colleges in developing the vocational subjects bids fair to parallel the work already accomplished, or being accomplished, in the sciences and foreign languages.

The acceptance of new subjects for college admission, before they are well organized and well taught, has made it extremely difficult to maintain standards. Not only were the universities forced to lower their standards to articulate with the high schools when schools were few and weak, but even after there was a large number of good schools others were just reaching

the minimum standards and so it was difficult to raise the college requirements. This claim is amply supported in the existence of such devices as the use of "conditions," "elective units from subjects taught in good high schools," and "adaptable units." Table XII shows that practically all high school subjects were credited for entrance by a part of the institutions named.

TABLE XIII

ENROLLMENT COMPARED WITH NUMBERS OF SCHOOLS ACCREDITED
BY NINE STATE UNIVERSITIES FOR THE YEARS:

State	1871	1875	1880	1885	1890	1895	1900	1905	1910
1. Mich....Students..	1110	1191	1427	1295	2153	2864	3192	4136	5383
Schools....		7	11	29	65	144	187	?	222
2. Minn....Students..	334	375	416	364	1048	2082	2824 ¹	3845 ²	5066 ³
Schools ⁴ ...					17 62	24 86	43 104	162 151	223 208
3. Mo.....Students..	238	478	596	573	428	631	1206	1838	2903
Schools....					23	52	126	128	201
4. Ill.....Students..	277	386 ⁵	431	362	469	810	2234	3729	5118
Schools....			21	34	57	126	172	260	316
5. Ind.....Students..	301	425	349	301	339	771	1016	1538	2564
Schools....		27	33	41	109	118	158	208	326
6. Iowa....Students..	448	620	560 ⁶	346	729	1307 ⁷	1438	1560	2352
Schools....			32	58	90	104	200	207	265
7. Ohio....Students..		66	235	323	493 ⁸	808	1236	1870	3050 ²
Schools....					51	64	?	181	294
8. Tex.....Students..				208	307	630	1041	1486	2594
Schools....				4	21	56	94	99	139
9. Wis.....Students..	485	424	483	387	783	1520	2422	3342	5538
Schools....			7	26	88	118	190	270	314

¹ Data for 1899. ² Data for 1904. ³ Data for 1909. ⁴ Upper column credited by Faculty, lower column credited by High School Board. ⁵ Data for 1876. ⁶ Data for 1881. ⁷ Data for 1896. ⁸ Data for 1891.

Observations Based on Table XIII

The committee of the Faculty of the University of Michigan which recommended the discontinuance of school visitation, in 1883, stated that while the diploma system was good for the schools it did not seem that it had increased the attendance at the university. Since the university up to that date had accredited only fifteen schools, it may be that the committee was correct. If that committee had been called upon to report ten years later, a very different condition would have confronted it. From 1885 to 1890, the number of accredited schools increased

from twenty-nine to sixty-five and the university enrollment for the same period changed from 1295 students to 2153. The table shows that, in almost every instance, a large increase in the number of accredited schools was followed by a marked increase in enrollment. Striking examples may be noted in the cases of Michigan, Wisconsin and Minnesota for the period ending in 1890, of Illinois in 1895, and of Missouri and Texas in 1900. A seeming exception occurs in the case of Indiana for the period ending with 1890. Two facts explain this apparent though not real exception. The preparatory department was dropped in 1889 and the increase in number of accredited schools followed so closely that the gain from the schools had not had time to overcome the loss in the preparatory department and at the same time show much gain in total enrollment. The results of the change are better shown in the figures for 1896.

Different factors entered into the large increases in numbers of accredited schools and the accompanying increases in college attendance. Many of these factors originated in the administration of the accrediting system. When institutions dropped their preparatory departments they became more active in their work with the schools. The minutes show that any change in administration accompanied by a manifestation of interest in the problem of certification almost always gave an impetus to affiliation and enrollment. In practically every case, the appointment of a special inspector of schools was followed by a decided increase in the list of accredited schools and the enrollment of students. This statement may be verified by comparing the dates of the appointments of inspectors in Table X with the numbers of schools accredited and the attendance for the same periods in Table XIII.

The conclusion becomes evident, when the records are studied, that an interest on the part of the universities in the schools resulted almost directly in an increase in the number of accredited schools and a larger attendance of students at the higher institutions.

Chapter Summary

The new method of admission to college arose out of a desire to unite the two parts of state school systems. The plan not only had the advantage of its own intrinsic merits but the lack of

efficient preparatory schools and a dissatisfaction with the private academies contributed to its development.

The original intention of the University of Michigan was to develop the high schools until they could do the work of the German Gymnasium, so that the university could do real university work. It was at first expected that the high school pupils would be examined by members of the Faculty of the University. Neither of these expectations was ever realized. Not only were the standards of entrance requirements forced down at first, but the formal examination of pupils was soon placed in the hands of the secondary school teachers.

The first decade, after admission by certificate had been adopted by the University of Michigan, was productive of different plans for selecting the accredited schools. In Michigan and Wisconsin the lists were determined by the faculties; in Indiana the State Board of Education was placed in control; while, in Ohio, all high schools in towns having a population of five thousand people, at the last census, were given the privilege of certification. Illinois began by providing for "county superintendents' certificates" admitting to the preparatory department, then allowed certain high schools to examine for the preparatory department and later designated two classes of schools, called "Examining Schools" and "Accredited Schools." The "Accredited Schools" alone had full power of certifying students to collegiate classes.

The different institutions were all striving to perfect their systems. Michigan restricted certification to applicants known personally to principals, limited the life of the certificate to three months and provided that application should be made for an annual inspection. Indiana provided that none but graduates of high schools would be received, and Wisconsin discarded examination by the graded schools.

The disposition to get rid of preparatory departments was conspicuous. Although Minnesota had not inaugurated certification, no institution worked harder to develop a system of state high schools. Preparatory and collegiate students were separated in class work in Indiana. The only exception to the seeming desire to get rid of preparatory work was found in the opening of a preparatory department by the University of Illinois.

The first ten years of the existence of the new system was characterized by the dispositions manifested rather than by actual results accomplished. At the close of the period the five institutions admitting students on certificate had, all together, accredited only 104 schools.

The period closed with an attempt on the part of Michigan to ascertain the standing of certificated students. The report of the committee appointed by the faculty was slightly more favorable to certificated students.

By 1890 all of the nine institutions were admitting students by certificate. The total number of schools accredited had risen from 104 to 583 within the decade.

The work of the universities, for the period, consisted largely in the development of details in connection with their respective systems. The matter of the visitation of schools received much attention. In Michigan, the question came up in connection with the admission of students from schools in other states. Minnesota met the same problem by providing that schools in other states accredited by their own state universities might certificate students to the University of Minnesota.

The classification of schools was undertaken by Iowa, Minnesota, and Illinois. Different institutions manifested a disposition to throw safeguards about certification and to define more fully regulations governing the privilege.

Within this period the universities assisted in making courses of study for the high schools. The Faculty of the University of Minnesota was called upon to assist in suggesting a course for the schools to be commissioned by the High School Board. A joint meeting of university instructors and high school representatives was held at the University of Iowa, at which a course of study was adopted for the state. The University of Missouri refused to modify her preparatory course in response to a request of the State Teachers' Association, and, because of the refusal, failed to obtain the complete cooperation of the schools of the state within the decade under consideration.

The second institution to investigate the record of certificated students was the University of Wisconsin. Students admitted by certificate were declared to be, on an average, of equal rank with those admitted by examination, with the qualification that

more "poor" students and more "good" students gained admission by the latter method.

The third decade of certification began to reveal the weaknesses and needs of the system. Some of the institutions showed a disposition to return to admission by examination. Minnesota discussed the plan of requiring a certain number of entrance credits to be based upon examinations given by the High School Board; the Board of Visitors of the University of Wisconsin recommended that applicants for admission be required to present the examination papers on which they were graduated; a committee of the faculty of the University of Texas proposed to require those who expected to graduate to take entrance examinations.

The problem of visitation received much attention. Minnesota elected an inspector to serve under the High School Board, and thus broke direct connection between the faculty and the high school instructors. In Michigan, Missouri, Illinois, Iowa, and Wisconsin special inspectors of schools were attached to the university faculties.

Previous to 1891, the high schools were not so numerous and consequently their influence in educational councils was not strong. In the following decade the schools steadily gained in power with the universities. During this period the higher and lower institutions may be said to have worked more together. Wisconsin accepted the high school courses arranged by the state department as standards for entrance requirements. The University of Michigan held a conference with the State Teachers' Association concerning admission requirements. The new requirements announced by the University of Missouri were first submitted to the State Teachers' Association and received the approval of that body.

One of the most indicative signs that the higher and lower institutions were becoming united may be found in the revised methods for announcing entrance requirements. In earlier days the completion of a certain amount of designated texts was required for admission to definite courses, later entrance requirements were announced in groups with certain limited options, and about the middle of this third decade of certification, the universities began to announce entrance requirements in

"credits," "groups," or "units," with more "electives" than formerly. This movement represented a transfer from college standards to a high school basis in the announcement of entrance requirements, and marked one of the most important developments in the history of college admission requirements.

The period closing with 1910 witnessed a phenomenal development in high schools. This growth was partly due to the work of the universities.

Visitation by special inspectors, connected with the higher institutions, brought out opposition and the period closed with a tendency to transfer inspection from university faculties to state departments and state boards of control. This tendency will receive attention in a later chapter.

A certain dissatisfaction with the preparation of students was expressed by different institutions. From time to time entrance requirements were raised and the schools were pulled up to a higher grade of efficiency. The large numbers of schools accredited tended to make careful and frequent inspection impossible, and institutions seemed forced to accept applicants from inefficient schools.

Four of the most important steps connected with the certifying system were the introduction of the new method of admission, the abolition of preparatory work from the higher institutions with the attendant effort to draw a line between preparatory and collegiate work, the appointment of special high school inspectors, and the change in the announcement of entrance requirements from the "course" system with no "electives" to the "unit" system with "electives." Table X furnishes assistance in the study of those movements and enables us to examine them from the standpoint of general rather than local import.

The abolition of preparatory departments in some cases was hastened by the higher institutions; in others, they were forced out by the demands of the lower schools. The retention of the preparatory departments tended to impede the growth of secondary schools. As long as the universities conducted such departments the faculties did not feel the need of throwing their individual support to high school development. The existence of preparatory classes in the universities also kept the high

schools from throwing their full support to the universities. The records show that when the higher institutions threw the preparation of students upon the secondary schools an era of good feeling and cooperation ensued.

The appointment of special inspectors was a distinct movement growing out of the increase in the number of high schools to be visited and a general feeling that inspection by members of the faculties was not meeting the needs. A perceptible increase in the number of accredited schools almost always followed the appointment of a special visitor. It may be noted from the table that the appointment of special inspectors, in the different states, with one exception, fell within a short period and thus shows that the movement was not local but general.

The change in method of announcing entrance requirements was important, since it indicated that college entrance requirements were henceforth to be measured by high school standards instead of college ideals. That this movement was also general and fell within a brief period may be seen by reference to Table X.

The vital touch between the universities and secondary schools has been through the subjects of common interest. Those subjects were the ones offered by the schools and accepted by the colleges for admission. The subjects accepted by nine institutions within a period of forty years are named in Table XI.

The branches meeting college entrance requirements within this period fall into different classes. Some subjects, although in favor at first, lost in popularity until they were practically eliminated from high school courses. Another class of subjects lost position for a time but returned in new forms. Others were developed in response to new social and economic conditions and, after a time, gained recognition as acceptable college entrance subjects. Still another class of subjects was so developed from year to year that, at the end of forty years, they were practically new subjects. Exceedingly few, if any, of the subjects have remained the same in content.

The whole matter of addition of subjects, of changes in content, and of development of method in teaching, has been bound up with the question of certification. The attitude of the universities toward high school subjects, from time to time, may be seen, in a measure, by reference to Table XI.

Table XII enables one to see at a glance the decades in which different subjects were added to the lists accepted for admission by the different institutions named. Some light is thrown upon the claim that college entrance requirements have dominated high school courses of study. The table shows that the claim is only partially true. The modern languages and sciences were taught in preparatory courses, and were included among the college entrance subjects before high schools existed in any considerable numbers in more than half of the states named. Indeed, there is strong evidence to support the claim that the universities, through certification, encouraged the teaching of the modern languages and sciences in the schools. At least it is certain that they assisted in developing them when they were once introduced.

A different attitude was held by the universities toward the vocational subjects. The schools have been the aggressors with reference to these and have forced their recognition for admission to college. Here it cannot be claimed that the colleges have dominated, for the schools have been the victors. The most that can be claimed is that the colleges, at first, did not assist with the vocational subjects.

The effect of certification upon college attendance may be partly judged by reference to Table XIII. The data seem to indicate that any considerable increase in the number of accredited schools was, almost immediately, followed by an increase in university enrollment. And so closely did the increase in attendance follow upon the growth in the number of recognized schools that it can only be explained, in part at least, by the closer relationship between the colleges and secondary schools resulting from the link of certification.

CHAPTER IV

PRESENT DAY CONDITIONS OF ADMISSION TO COLLEGE BY CERTIFICATE IN THE UNITED STATES (1911)

A critical study of the practices of leading institutions admitting students on certificate discloses the fact that there are certain fundamental principles underlying all systems. Among these principles the following ones may be cited: (1) the location of authority for the selection and inspection of schools; (2) the methods used in testing and aiding schools; (3) the formal administration of the admission of students; (4) the treatment of students and schools when once admitted; (5) the attitudes of the higher institutions toward courses of study in the lower schools; and (6) the limitations placed upon the two parts of state school systems by constitutional and legislative enactments. With these general principles in mind an attempt will be made to classify the different systems, in use, under fairly well differentiated types.

No effort will be made in this chapter to evaluate the merits and demerits of the various systems described; that part of the study will be reserved until after a survey is made of present day methods and conditions.

For the purpose of examination and description, from the standpoints of control in the selection and inspection of schools, the following types have been selected:

1. The New England College Entrance Certificate Board.
2. State Board of Education; e.g., Indiana.
3. High School Board; e.g., Minnesota.
4. State Association of Colleges; e.g., Alabama, Kentucky.
5. State University; e.g., Missouri, Wisconsin, Michigan, Texas, etc.
6. State Department of Education; e.g., New York, Florida, etc.

7. Joint control by State University and State Department of Education; e.g., West Virginia.

8. Special Types of Individual Institutions; e.g., University of Chicago, Vanderbilt University, Columbia University, Harvard University.

9. District Control; e.g., Commission on Accredited Schools and Colleges of the North Central States.

10. First step toward National System; e.g., the acceptance by institutions of students from other states when they come from schools accredited by State Universities.

TYPE ONE

The New England College Entrance Certificate Board

"On Friday, May 16, 1902, delegates from nine colleges met at Boston University to establish a Board for the purpose of receiving, examining and acting upon all applications of schools that should ask for the privilege of certification."¹

The Board, organized on the day named, is still in existence. It has issued nine annual reports. No attempt will be made to give an outline of all of the reports since the last one furnishes the main facts of interest bearing immediately upon this study. The statements which follow are based upon the Ninth Annual Report of the Board, dated May 12, 1911, unless otherwise accredited.

The Board is composed of thirteen members, or one representative from each of the thirteen institutions supporting the organization. The thirteen institutions holding membership on the Board are Amherst College, Boston University, Bowdoin College, Brown University, Dartmouth College, Mount Holyoke College, Smith College, Tufts College, University of Maine, University of Vermont, Wellesley College, Wesleyan University, and Williams College.

Membership on the Board is limited to colleges in New England and may be obtained by a majority vote of the faculties of the colleges already accepted.²

The regular annual meeting of the Board is held in May. A salary of five hundred dollars per annum is received by the

¹ First Annual Report, New England College Entrance Certificate Board, p. 5.

² By-Laws: First Annual Report, p. 7.

secretary. The board has not changed secretaries since the date of its organization.

No college holding membership in the organization may accept students on certificate from schools within the jurisdiction of the Board unless such schools have been approved. Different institutions are free to make such regulations with reference to requirements, not covered by the certificates presented by any applicant, as they may choose, but certificates must be accepted from approved schools for the work covered.

The expenses are provided for by assessing the colleges having representation on the Board in proportion to the number of students received by certificate from New England schools. The rules of the Board are in substance as follows:³

1. Schools desiring approval must make application to the secretary of the board giving full details concerning "courses of study, teachers, and equipment."

2. Applications must be received by April 1, and "are acted upon at the annual meeting in May."

3. "No school is placed upon the approved list unless it can prepare for college according to some one of the recognized plans of entering a college represented on this board."

4. "No school is approved unless it has shown by the record of its students already admitted to college its ability to give thorough preparation for college."

5. Schools rejected or dropped from the list must send three satisfactory students to one or more of the colleges belonging to the association inside three years before a new application for approval will be considered. If four years elapse after the school is rejected, or dropped, before the conditions named are met, the request will be treated as an original application.

6. A school, not under Rule Five, meeting all other requirements and having sent two satisfactory students to one or more of the colleges, represented on the board, in three years and having a candidate for admission for the next year may be put on the trial list for one year.

Also a school otherwise meeting requirements but not having sent the required students to college may be allowed to send one or more students on certificate for the purpose of establishing a record for the school. The names of the students and the names of the colleges to which they desire to go must be filed with the secretary of the board in advance. The school sending such students on trial will be dealt with in the light of the records made by its representatives.

7. "A school is judged by the record of students who have entered college with the consent of its principal."

This rule is evidently intended to release the principals from responsi-

³ Ninth Annual Report, pp. 18, 19 and 20.

bility in cases where students are admitted by examination and afterward make poor records.

8. "No school is approved for more than three years. The approval of a school dates from the first day of January of the year in which the approval is granted."

9. "No school is placed on the approved list for three years until it has been placed on the trial list for one year."

10. Schools may not be approved because of unsatisfactory records of students in colleges represented on the board, because of weak courses of study, inefficient instructing force or equipment, and because of ineligibility under Rule Five.

11. A school on the trial list or on the fully approved list must apply for continuation on the list by April 1st of the year in which its period of approval expires.

12. An approved school not having sent a pupil to a college, represented on the board, in three years and having a pupil to send the following year may be placed on the trial list for one year.

13. Approval may be withdrawn from a school at any time.

14. Certificates which do not cover all of the requirements of any college may be treated as the rules of such college may prescribe. A certificate from a school not approved by the board may not be received by any co-operating college "unless the school lies outside the jurisdiction of the board."

15. Reports of students for at least one-third of the first year in college with complaints of insufficient preparation must be made by colleges to the board, along with such other information as may be required. Reports may also be made to the schools.

16. The list of approved schools is published in the annual report of the board.

Among the distinctive features of Type One may be noted the following: (1) approval of schools based on college records; (2) period of approval, at most, three years; (3) final authority of approval not located in faculties but in a board composed of one representative from each institution belonging to the organization; (4) absence of personal inspection of schools; (5) close watch kept upon the student's first year's work in college.

TYPE TWO

Control of Inspection and Selection of Accredited Schools Located in a State Board

In 1873, the Board of Trustees of Indiana University voted to accept students on certificate from such high schools as the State Board of Education might designate.⁴

⁴ Minutes of Board of Trustees, July 18, 1873.

The State Board at that time was composed of the Governor, the State Superintendent of Public Instruction, the President of Indiana University, the President of the State Normal School, and the superintendents of schools in the three largest cities of the state. Since that time the Board has been enlarged by adding the President of Purdue University, and three citizens of prominence to be selected by the Governor.⁵ This board, as thus constituted, examines and commissions high schools in Indiana meeting such standards as may be established. The higher educational institutions of the state accept students on certificate from all schools commissioned by the board.

The following rules govern the board in selecting commissioned high schools:⁶

1. "The commissioned high schools shall include not less than four (4) years' work following the eight years in the elementary schools."⁷

2. "The following enumerated studies shall be taught in all commissioned high schools throughout the state, together with such additional studies as any local board of education may elect to have taught in its high school: Provided, that such additions shall be subject to the revision of the State Board of Education, Mathematics: Commercial arithmetic, algebra, geometry. History: United States, ancient, medieval or modern. Geography: Commercial or physical. English: Composition, rhetoric. Literature: English, American. Language (foreign): Latin or German. Science: Biology, physics, chemistry. Civil government: general, state. Drawing. Music."⁸

In addition to the subjects named the board has approved the teaching of "Agriculture, Manual Training, Sewing, Cooking, Domestic Science and Domestic Economy."

3. Schools must meet certain requirements with reference to buildings, libraries and laboratories.

4. (a) "The teaching in the high school and also in the grades below the high school must be good." (b) "At least two teachers must give all their time to high school work. One of the teachers in the high school must be a graduate of a college course that requires at least three full years of work beyond graduation from a commissioned high school."

5. (a) Minimum length of course thirty-two months. (b) Course must provide for all legally required subjects and such others as local authorities may deem advisable. (c) Advise that few studies be pursued one, two or three years and that no science be taught for less than one year. (d) Music and drawing must be taught. (e) "All courses that

⁵ School Laws of Indiana, 1911, p. 34.

⁶ See Uniform Course of Study for Commissioned, Certified and Accredited High Schools of Indiana, 1911, pp. 5, 6 and 7.

⁷ Based upon State Law, approved March 9, 1907.

⁸ *Ibid.*

prepare for college should provide for at least three years of foreign language."

6. (a) "Complete records must be kept showing the academic progress of each pupil." (b) "When a pupil is advanced from another school the record must show what standing was given and why."

7. If non-commissioned high schools arrange their courses properly the board will grant "certificates of equivalency" for work done so that pupils may pass from non-commissioned to commissioned high schools without loss of time.

Schools are usually commissioned for a period of three years but should the superintendent be changed a new inspection must follow as early as possible.

For purposes of inspection the state is divided into ten districts. With the exception of the Governor, one district is assigned to each member of the board. Indiana may be said to have ten different inspectors of commissioned high schools.

The special features of the Indiana system may be summarized as follows: (1) the higher institutions, not by law but by choice, have largely given the determination of their entrance requirements into the hands of the State Board; (2) the selection of schools is partly based upon provisions in the State Law and partly upon rules established by the board; (3) the inspection of schools is divided among ten members of the board—the Governor not being assigned a district for school visitation; (4) so far as the minutes of the State Board show there is no fixed plan for using the college records of students in any extensive way in checking up the work of the high schools; and (5) because of the form of the system used, the members of the faculties of the higher institutions do not have the right, nor do they attempt, to inspect the schools in any systematic way.

TYPE THREE

Schools Under Control of High School Board Employing Special Inspectors

In 1881, the Legislature of Minnesota provided for a "High School Board" to be composed of the Governor, the State Superintendent of Public Instruction and the President of the University of Minnesota.⁹ At the time this board was created, funds were provided for supplying state aid to certain high

⁹ See Chapter 144, General Laws of 1881.

schools. One of the conditions upon which schools might procure assistance was "that there be regular and orderly courses of study, embracing all the branches prescribed as prerequisite for admission to the collegiate department of the University of Minnesota."

Few more interesting problems in education may be encountered than may be found in a study of the interrelations of the University of Minnesota and the High School Board, as recorded in the minutes of both organizations for a period of thirty years. It is probable that the original high school law was due largely to university influences. The President of the University has always been a member of the board; and, until 1893, the inspection and examination of the schools were looked after by him. Since that time the board has employed special inspectors but the formal examinations remained under the direction of a representative of the University, until 1911.

The composition of the High School Board has been changed since it was first organized and now consists of "the State Superintendent, the president of the state university, and the president of the board of normal school directors, ex-officio, and the superintendent or principal of a high school, and one other person appointed by the Governor and confirmed by the senate. . . ." ¹⁰

Before presenting the rules which are employed in selecting "state high schools," attention should be called to two potent means of control at the board's command. The comparatively large sum of money distributed by authority of the board to such schools as it may select arouses the greatest local effort on the part of the people. Indeed, the selection of schools and the assignment of funds become a difficult task as may be learned from the following statement: "As stated before, the High School Board has found the creation of a high school list a delicate proposition. No matter what system or rules and regulations may be adopted, the districts just below the line feel that they are entitled to leniency, that they are maintaining as strong schools as certain towns already on the list. Pres-

¹⁰ Laws of Minnesota Relating to the Public School System, 1911, p. 77.

sure comes from various sources. Merchants consider that a high school brings young people and trade to a town; real estate men consider a state high school an aid in settling up a new region. . . . How and where to draw the line is the question."¹¹

Along with this inciting influence the board also has one of control. From almost the time the board was organized until the present it has conducted an extensive system of written examinations. These examinations may be held in all schools of a certain grade. The board may take these examinations into account in passing upon a school if it so desires. While these examinations are usually optional with the schools they are taken in considerable numbers and serve to a marked degree in toning up the high schools of the entire state. Certificates are issued, even on single subjects, by the High School Board to successful applicants. As already stated these examinations were for years immediately under the direction of the President of the University.

The following is a summary of the more important regulations of the board governing state high schools:¹²

Ex.
C. 2.

Conditions of Acceptance:

1. Adequate building and equipment.
2. A well-organized school of eight grades below the high school.
3. Sufficient library, laboratories, maps, globes, and reading matter for different grades.
4. A well qualified superintendent.
5. Liberal salaries.
6. School district must have a total population of 1000, an assessed valuation of \$200,000, and not less than 200 pupils.

Rules for Conduct of the School:

1. A session of nine months each year.
2. Every school shall have two teachers, beside the superintendent, giving full time to high school work.
3. Specific requirements concerning expenditures for laboratory material, for certain subjects, and for reference books.

¹¹ Seventeenth Ann. Rept. of Inspector of State High Schools of Minnesota, p. 4.

¹² *Ibid.*, pp. 48, 49 and 50.

Teachers' Qualifications:

1. Special regulations concerning grades of certificates for the different classes.
2. "The superintendent and high school instructors shall hold professional certificates of the first class." These certificates are obtained on the basis of graduation from a four years' college course or on examination. Professional certificates from other states are not accepted.

Schools once accepted are rated as "state high schools" and receive aid for at least two years.

The University of Minnesota accepts the graduates of state high schools having four-year courses providing they can meet these conditions: Applicants must be able to present credits for four years of work in English, one in Algebra and one in Plane Geometry, with nine other credits selected from a large list, and the applicant must show that the work was done in the high school with a "passed with credit" or "passed with honor" grade.

In addition to the list of "state high schools" the university has a small list of its own from which students are received on certificate. The university list is visited and accredited by the faculty. Private schools and a few city schools not desiring to avail themselves of state aid compose the independent list. Further details will be reserved until some evaluation of the High School Board system is attempted.

Type Three presents definite factors which may be recapitulated as follows: (1) A High School Board, created by law to supervise schools and distribute state aid; (2) special inspectors employed by the board and not connected with the state department or with any higher institution of learning; (3) the use of an extensive system of written examinations conducted under the direction of an examiner appointed by the board; (4) the acceptance of certificates by the university from schools approved by the board but with certain limitations; (5) the maintenance of an individual list of schools by the university; and (6) records made by students admitted on certificate are communicated to the high school inspectors and to the schools.

TYPE FOUR

Schools Accredited by a State Association of Colleges

The last five years have witnessed a persistent and fruitful effort in the Southern states to differentiate preparatory from collegiate work. With few exceptions all of the Southern colleges were conducting preparatory departments or doing much preparatory work in connection with college classes ten years ago. Within the last decade great strides have been made. Among the most conspicuous movements must be ranked the organization of different state associations of colleges. These organizations have for their object the establishment and maintenance of higher educational standards in secondary and higher institutions of learning.

As a good example of the type of associations indicated, "the Association of Alabama Colleges" may be taken. On April 13, 1908, the presidents of ten degree-granting colleges in Alabama met at Montgomery and effected the organization named above.¹³

"The purposes of the organization as stated at the time were (1) to encourage the growth of high schools by raising college entrance requirements; (2) to elevate college standards; (3) to bring about a unity of educational endeavor among the colleges themselves."

At the third annual meeting of the association, March 24, 1910, among other resolutions the following was passed: "That, for the purpose of selecting a common list of accredited schools and preparing uniform examinations for applicants coming from unaccredited schools, there shall be a joint committee consisting of one member from the faculty of each college belonging to the association."

This committee was empowered to select and publish a list of accredited schools. The committee thus provided met the next month and selected its first list of approved schools. On April 29, 1911, the following regulations were adopted for the affiliation of schools:¹⁴

¹³ Bulletin of the Association of Alabama Colleges, 1911, p. 3.

¹⁴ *Ibid.*, pp. 5 and 6.

1. For full affiliation a school must have a four-year high school course based upon seven years of elementary work. The school must have at least three teachers giving full time to high school instruction. Recitation periods must be at least forty minutes long.

2. For partial affiliation, a three-year high school course, two teachers wholly employed in high school work and forty-minute recitation periods are required.

3. Schools desiring approval must make application to the secretary of the association.

4. For the purpose of inspection the state is divided into districts and each member of the association visits the schools in one district.

5. Schools must make such reports to the secretary of the association as may be required.

6. A school applying for recognition will be visited by the secretary of the association or by some one designated to do so.

7. Each college in the association is expected to submit, by February 15 of each year, a list of new students, with name of school from which each came, whether admitted by certificate or by examination, and the number of entrance units presented.

The "Association of Kentucky Colleges" has a similar committee on accredited schools but its methods of control do not differ materially from those described.

In this type of administering certification, (1) the colleges delegate authority to a committee composed of college representatives; (2) the association is altogether voluntary and is not guided or restrained by state law; (3) the schools are visited by representatives of the different colleges; (4) all students entering the Freshman classes are reported to the committee; (5) uniformity in credits and entrance requirements must be observed; (6) the expenses are pro-rated among the members of the association.

TYPE FIVE

Control Lodged in State Universities

The absolute control of its own entrance requirements was denied to no institution of higher learning until within recent years. For this reason the origin and development of the certifying system has been largely in the hands of the higher institutions. Many of the state universities have determined the the regulations governing the affiliation and inspection of accredited schools in their respective states. With variations in different states a distinct type of university control prevails.

Differences in the administration of the university type of control may be noted in the authority entrusted with the final approval of schools and in methods of inspection. The final authority for passing on the selection of schools may be vested in the General Faculty, as at the University of Texas; in the Faculty of Liberal Arts, as formerly at the University of Iowa; or, in a committee of the faculty appointed by the president, as at the University of Missouri. The minutes of faculties examined give evidence that single individuals have been, at times, entrusted with the acceptance or rejection of schools. In all such cases, however, the university as an institution is held responsible for the final action. Likewise different methods are used by the different universities in the visitation and inspection of schools. Formerly, in California, the different subjects in the high schools were inspected by instructors from the university doing similar work. In Wisconsin, three or four members of the faculty may inspect a school at the same time. In other states the regular inspector may be assisted by such members of the faculty as may be adapted to the work, as in Texas; or, still, the regular inspector may do practically all of the work, as in Missouri.

The steps required for the affiliation of schools as well as the regulations observed vary with different states. No attempt will be made to give the practices in all states. Texas and Missouri will be used as types, the former to represent the steps observed and the latter to indicate standards required. The steps observed by the University of Texas in placing any school on the accredited list are in substance as follows:¹⁵

1. Schools must first make voluntary application for recognition.
2. Memoranda blanks must be filled out giving data concerning courses of study in the different branches, numbers and qualifications of teachers, information concerning equipment and such facts as may give some idea of the efficiency of the school.
3. The course of study must be approved by the high school visitor.
4. Examination papers written by pupils and graded by the high school teachers, the questions prepared in the schools, are requested. These examination papers are read by instructors in the university and a report is made to the high school visitor.
5. The school is visited and inspected.

¹⁵ Catalogue 1910-1911, p. 445.

6. The high school visitor, taking into account the report on the papers and the results of the inspection, makes a recommendation to the general faculty. The action of the faculty is communicated through the office of the high school visitor to the superintendent of the school.

The following requirements for the accrediting of schools are announced by the University of Missouri:¹⁶

1. Four years' course of nine-month terms.
2. Three teachers, one of whom may be the superintendent. Teachers limited to six periods of teaching per day. Graduates of colleges strongly recommended for high school teachers.
3. One laboratory science must be taught in the school.
4. Good equipment for teaching English and History. Adequate library and maps.
5. At least fifteen units of work must be required for graduation.
6. The school must give instruction in English, 3 units; Mathematics, 2 units; History, 2 units; one Foreign Language, 2 units; Science, 2 units; and at least 4 units selected from an indicated elective list.

Characteristics are found in Type Five, not encountered in the others described, which may be epitomized as follows: (1) complete control of selection of schools and school visitation centered in one institution; (2) various methods of inspection used, such as visitation by one inspector for all subjects, inspection by committees and inspection of each subject by a specialist from the faculty; (3) careful steps observed in accrediting schools; (4) a disposition to make a close connection between the work of the schools and the work of the colleges.

TYPE SIX

Control Through State Departments

In a few states the matter of certifying students has been placed by law within the power of the state superintendent of public instruction. New York, Florida, and South Dakota may be named as examples.

New York does not properly come within the requirements of a *bona fide* certifying system. In accordance with the regulations of the Board of Regents and under the immediate supervision of the commissioner of education, an extensive system of examinations is conducted. Certificates are issued

¹⁶ Circular of Information to Accredited Schools, 1911, p. 7.

upon the basis of the examinations. These certificates may be tendered for admission to college, but no law provides that they shall be accepted.

At present the state law of South Dakota places the control of high schools and the matter of certification entirely with the state department. In view of the fact that the state superintendent appoints the board delegated to suggest a uniform course of study and that the university bases its entrance requirements on that course, the state department of Florida may control the college admission requirements of the state. The laws for South Dakota and Florida will be quoted later in this chapter.

The important factors in this type of control are, (1) it places the authority for the control of admission requirements outside the college, and (2) it tends to break the direct connection between the teaching bodies of the higher and lower institutions.

TYPE SEVEN

Joint Control by State University and State Department of Education

In different states, for example, Missouri, Ohio, and Wisconsin, a double system of school inspection prevails. In some cases the two sets of inspectors exchange reports, in others, the state inspectors give more attention to the smaller schools while the university inspectors visit the larger ones. In still other states the two sets of inspectors work independently.

The cases suggested are not good examples of what may be designated joint control. A good illustration of this type is found in West Virginia. There the inspection of high schools is done in connection with the state superintendent's office by the professor of secondary education of the university faculty. The inspector makes two reports, one to the state superintendent and one to the university. A committee of the faculty has full control of all matters pertaining to accredited schools.¹⁷ Thus inspection is carried on under the auspices of the state department and the control of accrediting schools is lodged in a committee of the faculty of the university.

¹⁷ Catalogue, 1911, p. 32.

SPECIAL TYPES

*Individual Independent Institutions*1. *The Vanderbilt Plan*

The Chancellor of Vanderbilt University, in a circular letter dated from time to time and sent to principals of preparatory schools, uses the following words: "When a school has been tested successfully by the examination of its pupils for a number of years, and it is found that the school quite regularly sends some of its graduates to college, where their preparation can be further tested in class, the privilege of entering its students without examination is granted for a limited period."

It may be observed that the principles underlying this plan are not different from those applied by the New England College Entrance Certificate Board. In the case of Vanderbilt University the complete control is in the hands of one institution. It is also probable that the single institution keeps in personal touch with the teachers of its accredited schools. When the fact is considered that Vanderbilt has limited the number of its accredited schools to probably twenty-five or thirty, it may be concluded that not only is a close watch kept upon the schools, but that the system as applied is merely a supplement to the system of admission by examination.

2. *The Columbia Plan*

In 1909, the President of Columbia University announced a new plan for the admission of students to Columbia College.¹⁸ The gist of this plan may be given best by means of quotations from the announcement. "We have discontinued," said President Butler, "the separate committees on admission, which have heretofore passed upon the applications of students who desired to enter either Columbia College, Barnard College, or the Schools of Applied Science. We have united these three committees and their work in one body, to be known as the Committee on Undergraduate Admission. This committee will have jurisdiction over all questions relating to the admission of any student who comes to Columbia University for undergraduate work of any kind whatsoever. To the chairmanship of this committee an officer

¹⁸ President Nicholas Murray Butler, *A New Method of Admission to College*, *Educational Review*, Vol. 38 (1909).

has been appointed of professional rank, with no other present duties.”¹⁹ The officer indicated is expected to keep in personal touch with teachers and schools sending students to Columbia College. The announcement continues: “We shall not permit schools to certificate pupils to us as qualified for college admission without examination, but we shall ask schools to give us transcripts of the records of their pupils, in order that consideration may be given to these records, together with the results of the college admission examination.”²⁰

Considerable light is thrown upon the application of the system by the following statements: “It is obvious that under this plan a student who has obtained a very excellent school record for three or four years, would have to make a pretty poor exhibition at the college admission examination in order not to be admitted. A student with a bad school record would have to pass a very excellent examination to get in. . . . In addition to that, we propose that in doubtful cases, before a decision is arrived at, either in the affirmative or the negative, there shall be a personal interview between the candidate and the chairman of the Committee on Undergraduate Admission.”²¹

The further statement is made that it is proposed that the committee on admission shall keep in touch with students after they are admitted to college.

It may be claimed that this plan does not properly come under a so-called system of certification. President Butler specifically states that all students must pass entrance examinations. If the certificate report of a student's work is permitted to over-balance the examination record, it would seem that in such case the student would, in fact, be admitted on certificate and not on examination. This point is immaterial so far as the purpose of the presentation of this plan is concerned.

Since certification of high school records enters as a factor, it seems proper to present an outline of the plan.

3. *The Harvard Plan*

The new plan of admission to Harvard College became effective June, 1911. Previous to that time, the plan was announced

¹⁹ *Educational Review*, Vol. 38, p. 165.

²⁰ *Ibid.*, p. 166.

²¹ *Ibid.*, p. 167.

to the principals and headmasters of secondary schools through the Chairman of the Committee on Admission. The requirements as found in that letter are here given: "A candidate (1) must present evidence of an approved school course satisfactorily completed; (2) and must show in four examinations as explained below that his scholarship is of a satisfactory quality:

"School Record

"A candidate must present to the Committee on Admission evidence of his secondary school work in the form of an official detailed statement showing (a) the subjects studied by him and the ground covered; (b) the amount of time devoted to each; (c) the quality of work in each subject.

"To be approved, this statement must show (a) that the candidate's secondary school course has extended over four years; (b) that his course has been concerned chiefly with languages, science, mathematics, and history, no one of which has been omitted; (c) that two of the studies of his school programme have been pursued beyond their elementary stages, *i. e.*, to the stage required by the present advanced examinations of Harvard College or the equivalent examinations of the College Entrance Examination Board.

"The examinations

"If the official detailed statement presented by the candidate shows that he has satisfactorily completed an approved secondary school course, he may present himself for examination in four subjects as follows: (a) English; (b) Latin, *or*, for candidates for the degree of S.B., French or German; (c) Mathematics, or Physics, or Chemistry; (d) any subject, not already selected under (b) or (c), from the following list: Greek, French, German, History, Mathematics, Physics, Chemistry.

"These four examinations must be taken at one time, either in June or in September."

It is claimed for this plan that it gives great liberty to schools in the adjustment of their own courses, and that no detailed adjustment of units of work is necessary; and that the examinations given on the four subjects selected by the candidate are sufficiently broad to meet all needs of good teaching wherever done. Examinations are considered in connection with the school records. No students are admitted with conditions.

Again, it is the element of certification on high school work involved, and not the claim that Harvard has a complete certifying system, that leads to the introduction of the Harvard plan in this review of systems.

4. *The Chicago Plan*

The principal features of the revised plan of admission to the University of Chicago may be summarized as follows:²²

Requirements

1. Fifteen units or the work of a full four-year high school course.
 2. Three years of high school work in English (the only subject specifically prescribed).
 3. In addition to the requirement in English, the applicant must have studied one other topic at least three years and a third topic at least two years. These subjects are to be selected from five groups, viz.: (1) Ancient and Classical Languages; (2) Modern Languages; (3) History, Economics, Civics; (4) Mathematics; (5) the Natural Sciences.
- "The remainder of the students' time may be devoted to any subjects which the school accepts for its own diploma."²³

It is stated that a careful examination of schools will be made before putting them on the approved list. The following quotation will be discussed later in making an evaluation of the Chicago plan: "Heretofore the schools have been obliged to meet a test of personal inspection by an examining officer of the university. Hereafter representatives of the schools are to be invited to come to the university to visit the classes in which work is done continuing that of the schools."²⁴

The plan of admission is bound up with certain requirements for graduation. The student must continue through his Freshman year some one of the subjects studied extensively in the high school. Before the end of the second year he must read readily some modern language other than his own. The student is required to take at least three college courses in his own language. Other requirements are announced for graduation but are not vital to the question under immediate consideration.

Such, in outline, is the new Chicago plan. That it is a real certificating system of admission, seems evident.

DISTRICT TYPES

Commission Control

At the sixth annual meeting of the North Central Association of Colleges and Secondary Schools, March 29, 1901, a paper

²² New Plans for Entrance and Graduation at the University of Chicago, James Rowland Angell, M.A., *The University of Chicago Magazine*, July, 1911, pp. 283-285.

²³ *Ibid.*, p. 284.

²⁴ *Ibid.*, pp. 284, 285.

was read by Dean S. A. Forbes, of the University of Illinois, on the subject: "The Desirability of so Federating the North Central Colleges and Universities as to Secure Essentially Uniform or at least Equivalent Entrance Requirements."²⁵ As an outcome of that paper and the discussion which followed, a committee was appointed to report on a plan for carrying out the suggestions made. The movement led to the organization of a Commission on Accredited Schools and Colleges of the North Central States.

Since annual reports of that commission are issued, it does not seem necessary to attempt to give in detail the form and work of the organization. It does seem proper in this connection to set forth some general facts relating to the object and work of the Commission.

The universities and colleges in the North Central Association were constantly receiving students from other than their own states. Some were from good schools and some were from poor ones. As the number of schools increased it became impossible for the universities in the several states to inspect all schools presenting applicants for admission. And so, the commission was organized for the purpose of pooling interests and dividing responsibility.

The commission selects a list of schools of unquestioned merit, from which all the colleges may accept students on certificate. The visitation of the schools is done by the several state inspectors. "The accrediting shall be by vote of the association upon the recommendation of the commission based upon the report of the committee of inspection."²⁶

The requirements of the commission are in general higher than those of the different states, the desire being to select only the best schools in the several states for approval.

In 1911, the Association of Colleges and Preparatory Schools of the Southern States began the organization of a commission similar to that of the North Central States.

²⁵ Proc. North Central Association of Colleges and Secondary Schools, 1901.

²⁶ Report of the Commission on Accredited Schools and Colleges of the North Central Association, 1910, p. 5.

A Step Toward a National System

A method of wider practice than any so far described is probably to be found in the admission of students on certificate when the school from which the applicant comes is approved by its own state university. As early as 1887, Minnesota voted to adopt this general policy. Since that time the practice has steadily increased. The wide differences of high school and college standards in the different states, at present, subtract from the efficiency of the policy and even imperil the expediency of its use. Nevertheless with all of its weaknesses the method is widely used.

Methods Used in Testing Schools

Every system of admission by certificate, worthy of consideration, must employ some means for testing the work of its accredited schools. The methods in common use may be described under four heads: (1) reports; (2) inspection; (3) examination of high school pupils; and (4) records of students in college. The types of systems previously described all use one or more of these means. Some discussion of the details of the four methods suggested will be made.

1. Reports

So far as has been ascertained, no secondary school in the United States is required by law to make reports to higher institutions of learning. In some states reports must be made to boards if certain aid is desired, but the legally required reports are almost always made to the state departments of education. This means that such information as colleges secure from the secondary schools must be voluntary. Notwithstanding the high schools are at liberty to refuse to make reports, the desire for recognition and the privilege of certification rarely fail to produce all information desired by the colleges; and furthermore it is usually furnished with kindly spirit. Requests for detailed reports frequently cause superintendents and school boards to take inventory of their conditions, and reveal weaknesses not previously recognized.

A collection has been made of report-blanks used by different state boards, state universities, state college associations and

independent colleges. Institutions vary widely in the amount of information required. The University of Oregon accredits schools provisionally on the statement of the principal that his school is carrying out the regular four-year state high school course; the University of Virginia bases recognition upon a four-page report on seventy-six different items; and in many cases the items are subdivided.

Four general types of reports are used: (1) reports of principals, superintendents and school boards upon which original recognition may be partly based; (2) reports of inspectors; (3) reports of the work done by individual graduates of schools; and (4) annual reports made to the colleges by the high school authorities.

As stated, the number and content of these different reports vary greatly. The more comprehensive examples of the first type deal minutely with (a) buildings, equipment, libraries, laboratories, references; (b) school organization, grades, number of pupils; (c) preparation and number of teachers; (d) course of study; and (e) support of school. The reports compiled by inspectors deal with some of the items mentioned but in addition refer to methods of teaching, discipline, personalities of teachers and school officials, and to the spiritual side of the school. The reports on the work of individual pupils are usually in the form of entrance certificates and give the subjects completed, the time used, text-books studied, and class grades obtained. Finally, the annual reports required while repeating, in the main, the same general type of information required for original affiliation, enable the colleges to judge of changes made in the course of study, the corps of teachers, the up-keep of physical conditions and any general tendencies to raise or lower the efficiency of the school.

2. Inspection

The second means of gaining necessary information concerning the efficiency of the high school work is that of personal visitation. The terms "inspector" and "inspection" do not properly represent either the person or the work done by a competent university representative visiting a high school. The title "visitor" seems to some not only less offensive to the popular ear but more nearly appears to represent the capacity in which

the one delegated by the higher institution should appear in the lower one.

The universities send their representatives not only to inspect, to look into, but to aid and encourage the schools. The higher institutions are expected to gain knowledge concerning the schools and to render assistance through visitation. The efficient high school visitor is a mediator and advisor and not a dictator.

Some of the duties that a high school visitor may be called upon to perform are as follows: (1) visitation of classes; (2) the making of addresses to high school pupils, to teachers, and to the public; (3) meetings and consultations with school boards and prominent citizens in the interest of schools; (4) consultations with teachers, principals and superintendents with reference to courses of study, methods of teaching, and school organization. Who will say that one who performs these services for the schools will not be able to bear to the higher institutions more valuable information concerning the actual conditions of the schools than could possibly be conveyed in the most voluminous report made by the schools?

3. *Examination of High School Pupils*

When President Frieze, of the University of Michigan, first proposed the idea of certification it was intended that members of the faculty should go out to the high schools and hold formal examinations.²⁷

In 1886, when the Faculty of the University of Minnesota voted to admit students on certificate, the President objected on the ground that such action "would disparage the entrance examinations of the university."²⁸

There is little doubt that the attitude manifested at that time and continued thereafter had much to do with developing the most comprehensive examination system found in any state in the Union possibly with the single exception of New York. The Senior High School Inspector of Minnesota estimated that one hundred thousand papers were written by pupils of the Minnesota schools and graded under the auspices of the High School Board in 1911. Ninety teachers of the state were employed

²⁷ Ann. Rept. Bd. Reg., 1870; Cat. 1869-'70, pp. 62, 63.

²⁸ Faculty Minutes, University of Minnesota, Feb. 13, 1886.

about twelve days in doing the work. He furthermore stated that there are few high school graduates in Minnesota who do not hold one or more certificates issued upon High School Board examinations. And yet these examinations are entirely optional. So popular did these examinations become that in 1909 a law was passed by the Legislature extending the privilege of the High School Board examinations to private schools and academies. The certificating system in Minnesota is greatly supported by these examinations although they are not required for high school graduation or for admission to the university.

In North Dakota, the high schools are divided into four classes. The University accepts students on certificates only from schools of the first class. "The State High School Examining Board," states the Registrar, "of which the President of the University is Examiner, issues questions in all high school subjects. These examinations must be taken by all high schools other than the first class and may be taken by first class high schools. First class high schools are required to take at least one of these examinations each year." Thus it may be seen that certification in North Dakota is partially based upon formal examinations held in the schools.

For years the University of Texas has required that examination papers, prepared in the schools, be submitted as one of the important factors in determining the original affiliation of a high school. The questions are prepared by the high school teachers, the papers are graded by the ones setting the examinations and are then sent to the university for revision. The papers are usually required only when the school is first put on the list, but frequently when schools lose in standards of efficiency they are requested to submit examination papers or lose affiliation.

Thus schools may be tested by direct examinations as in North Dakota, by supporting examinations as in Minnesota, or by indirect examinations as in Texas.

4. *Records of Students in College*

The extremes of the use of college records in testing schools are illustrated by the practices of the New England College Entrance Certificate Board and the University of Oregon. In

New England before a school is permitted to certificate students regularly to the colleges having representatives on the board it must have sent a required number of satisfactory students to one or more of the colleges concerned. When a school already accredited sends unprepared students to college it loses the privilege of certification. The University of Oregon will admit students on certificate, conditionally, from any high school in the state providing the principal will certify that the high school course of study prescribed by the state has been completed. In the case of the Certificate Board, college records are made the entire basis for the recognition of any school; the University of Oregon recognizes the schools and then tests their efficiency by the work of students in college. Between these two extremes of methods used in testing schools and extending certificate privileges, all shades of practices may be found. Very few colleges do not apply this test in some form to their accredited schools.

Different institutions have worked out special methods for rating affiliated schools. The plan used by the University of California may be cited as an example. The California plan is as follows:

"Let us now suppose that a given secondary school, the X High School, contributes to the freshman class in a given year two or more of its graduates, and that during the first half of the freshman year these students undertake, say, 53 units of university work distributed among the five grades of scholarship as follows:

		(Grades of Scholarship I II III IV V				
School X	(Units of work	5	21	20	5	2 = 53

"We desire to know the general average for the high school, that is, the efficiency of the school in terms of scholarship grades in the university. To find this general average, multiply the number of units of work in each grade of scholarship, as above, by the numeral representing that grade; add the products so obtained; divide this total by 53, the number of units of work taken, to obtain the average grade per unit of work."²⁹

When the indicated multiplications and divisions are made an average of 2.58 is obtained. This number is designated the "index figure" of "School X." The schools of California are ranked in the report cited on the basis indicated for nine years.

²⁹ Biennial Rept. of the President of the University, January, 1911, p. 151.

Further attention will be given to the report in the chapter on evaluations.

The ways in which freshman college records are communicated to schools vary with institutions. The University of Texas communicates them to principals and teachers through the representative of the university visiting the school. At the close of the first term the records of all freshmen are copied on individual cards. These cards are taken to the schools by the visitors and a consultation is held with the superintendent, principal, and teachers with regard to them. The Faculty of the University of Minnesota, as cited under "1908," Chapter III, voted to send a printed list of delinquent students at the end of each semester to each instructor in the university and to the State Inspector of High Schools. It was also voted to send to all city superintendents and heads of accrediting schools, "a list of accredited schools where students (in their first year) have been dropped, with the number of such delinquents for each school."

That good and bad records of students in colleges have tremendous influences upon high schools will be doubted by no one who has ever served as visitor or inspector of schools. Indeed, the same records which agitate the preparatory schools may be used to advantage in checking up the work of college instructors. Efficient high schools often take the measure of college teachers while the college teachers are estimating the work of the high schools.

Form, Content, and Acceptance of Certificates

The forms of certificates, as shown by a collection made from many institutions in the United States, differ in size from a card, six inches long and four inches wide, used by the Kentucky Association of Colleges, to a four-page folder prescribed by the North Central Association of Colleges and Secondary Schools and adopted by different universities in the Middle West. Universities outside the territory named also use comprehensive certificates.

The amounts of information required by different institutions vary as much as the size of certificates. The Kentucky card merely states that the applicant is a graduate of a certain

school and that he has satisfactorily completed a stated number of units in given subjects. The certificate of the University of Missouri covers subjects studied, years of high school in which subjects were taken, text-books used, ground covered, numbers of weeks given to subjects, numbers of recitations per week, length of recitation periods, laboratory periods and their length, and other remarks. Ohio State University requires that numbers of pages in texts covered be given and that books read in English and numbers of exercises performed in science be designated. The requirement of details must be interpreted as a disposition to ascertain the exact work done by applicants. When a complete statement is made the college may or may not reduce the number of units with which the applicant is accredited.

In the practical administration of the requirement and presentation of comprehensive certificates, friction may arise. The college may exaggerate technical shortcomings and the schools may resist the requirements of detailed statements. Usually the latter occurs when the work has not been done in good faith, when the school has been derelict in keeping accurate records or when there is an indisposition to do the work necessary to get up the reports. Schools sometimes insinuate that the colleges do not trust them, and take offense. This brings up one of the most fundamental questions underlying any system of admission to college by certificate: Who shall be held responsible for the certificate of any student?

The question raised is answered in three ways. Some colleges, as members of the New England Association, hold the schools absolutely responsible for their graduates. A pupil may do a passable grade of work under pressure in the preparatory school but when he enters college he may make a poor showing for his school, and this in spite of the fact that he has ability. Here the school would seem to be held responsible not only for the past but for the future of its pupils, although they may pass into an environment over which the schools have no control. Another answer is given by that class of colleges which would dominate every detail of high school work. They look upon the schools as being incompetent and assume all responsibility in the transfer of pupils. They inspect with unsympathetic eyes and accept recommendations from high school in-

structors as matters of form. A third class of institutions look upon high schools as parts of an educational system with which they should cooperate; they regard high school instructors as co-laborers and worthy of assistance and confidence. They are willing to divide responsibility. This type of institution may request comprehensive certificates; the cooperative schools will usually be willing to present them. Such a course means that the transfer of pupils from the high school to the college is made in good faith. Honest men count their change not to entrap a fellow laborer but to avoid mistakes. Colleges and high schools should have nothing to fear from a complete exchange of knowledge concerning an individual for whose training they are jointly responsible.

A further question should be raised in this connection. Should any individual who may properly be graduated from an accredited high school be certificated into college, or should only those attaining a certain standing be admitted on recommendation of the principal? In North Dakota only those who graduate from "First Class" high schools are admitted on certificate; others must pass examinations in order to gain admission. Minnesota provides that graduates of schools under the supervision of the High School Board may be admitted without examination provided they secure the rank of "passed with credit" or "passed with honor." In North Dakota a pupil graduating from a "First Class" school and just passing might be certificated; in Minnesota only those obtaining a required rank would be admitted without examination.

Who shall assume responsibility for the doubtful applicant? The suggestion of mutual cooperation again comes to the front as a solution. Either a complete report may be made by the schools, with or without recommendations, and the colleges share responsibility in the final decision or resort must be made to entrance examinations for those who do not obtain a required grade in the high schools if justice be done to all.

TABLE XIV¹

REQUIREMENTS FOR ADMISSION TO B.A. AND B.S. COURSES OF
THIRTY-NINE STATE UNIVERSITIES IN 1911

States	Total Units Required	Units of Conditions Allowed	Total Units Prescribed		Units of Foreign L. Prescribed		Units of Science Prescribed		Units of Vocational Subjects Allowed
			B.A.	B.S.	B.A.	B.S.	B.A.	B.S.	
1. Alabama.....	14	2	10 $\frac{1}{2}$	10 $\frac{1}{2}$	3	2	1	2	3 $\frac{1}{2}$
2. Arkansas.....	13	3	10 $\frac{1}{2}$	8	3	0	0	1 $\frac{1}{2}$	2 $\frac{1}{2}$
3. Arizona.....	15	P. ²	11 $\frac{1}{2}$	10	4	2	1	1	?
4. California.....	15	3 ³	10		4		1		3
5. Colorado.....	15	2	13		4		2		3
6. Florida.....	12	2	11	8	3	0	0	0	1
7. Georgia.....	14	4	12 $\frac{1}{2}$	7 $\frac{1}{2}$	5	0	0	0	3
8. Idaho.....	16	P.	12 $\frac{1}{2}$	11 $\frac{1}{2}$	6	4	0	1	2
9. Indiana.....	16	?	11		3		1		?
10. Illinois.....	15	?	9 $\frac{1}{2}$	7 $\frac{1}{2}$	3	2	0	0	?
11. Iowa.....	15	1 $\frac{1}{2}$	8 $\frac{1}{2}$		2				$\frac{1}{2}$
12. Kansas.....	15	2	11 $\frac{1}{2}$		3		2		1
13. Kentucky.....	15	2	11 $\frac{1}{2}$	9 $\frac{1}{2}$	4	2	1	1	3 $\frac{1}{2}$
14. Louisiana.....	14	3	7 $\frac{1}{2}$		1		0		?
15. Maine.....	14	?	10 $\frac{1}{2}$	10	4	2	0	1	1
16. Minnesota.....	15	1 $\frac{1}{2}$	6		1 $\frac{1}{2}$		0		4
17. Missouri.....	15	?	7		2		0		4
18. Mississippi.....	14	2	12 $\frac{1}{2}$	?	4	?	0		1
19. Michigan.....	15	1 $\frac{1}{2}$	9		2		1		0
20. Montana.....	15	2	10		2		1		?
21. Nevada.....	15	?	8	8	4	2	0	1	4
22. Nebraska.....	15	3	8 $\frac{1}{2}$		3		0		?
23. New Mexico.....	15	P.	13		2		2		2
24. North Carolina.....	14	2	13 $\frac{7}{10}$		5 $\frac{7}{10}$		2		0
25. North Dakota.....	15	?	9		2		1		5
26. Ohio.....	15	2	11		4		1		2
27. Oklahoma.....	15	?	9 $\frac{1}{2}$		2		1		2
28. Oregon.....	15	2	9 $\frac{1}{2}$		2		1		2
29. South Carolina.....	11	?	?		?		?		0
30. South Dakota.....	15	P.	5		0		0		1
31. Tennessee.....	14	2	10		4		0		4
32. Texas.....	14	2	10 $\frac{1}{2}$		3		0		2
33. Utah.....	15	P.	6		0		0		?
34. Vermont.....	14 $\frac{1}{2}$	?	13 $\frac{1}{2}$	12 $\frac{1}{2}$	7	6	0		?
35. Virginia.....	14	2	11		4		0		2
36. Washington.....	15	2	12 $\frac{1}{2}$	10 $\frac{1}{2}$	4	2	1	2	3
37. West Virginia.....	15	P.	9		2		1		1
38. Wisconsin.....	14	?	6		2		0		4
39. Wyoming.....	15	P.	8		2		0		5

¹ Compiled from Catalogues for 1910-1911.

² The letter "P" in column two is used for "Preparatory Department."

³ Interrogation points mean that the definite amounts required and allowed are not stated in Catalogues.

Observations Based on Table XIV

Table XIV has been compiled for the purpose of making a study of (a) the entrance requirements of those institutions having most to do with certification, (b) their fidelity to their own announced standards, and (c) their disposition to adjust their admission requirements to high school conditions, as shown by prescriptions in foreign language and science requirements and in allowances for vocational subjects.

In arranging the table, six groups of high school subjects were held in mind. These groups were: (1) English, (2) His-

tory, (3) Mathematics, (4) Foreign Languages, (5) Sciences, and (6) Vocational subjects. The first three of these groups are taught in some form in all high schools and are required in some amount for admission by practically all colleges. The problems which have arisen in connection with certification in English, history, and mathematics have usually pertained to methods and materials rather than fixed requirements. The foreign languages, sciences, and vocational subjects have appeared in the high schools in about the order named. The last three groups of subjects have largely furnished the debatable grounds in connection with certification. The schools have claimed that the colleges were too much inclined to require foreign languages and not disposed to accept the sciences and newer subjects, and that the colleges have been slow in adjusting their admission requirements to changing needs and conditions. The colleges have replied that the languages could be taught more efficiently with less expense to the schools than the other two groups of subjects, that they furnished better preparation for college work, and, finally, that the new subjects are so poorly organized and imperfectly taught that they are not yet worthy of recognition. Whatever may have been the arguments, the facts are that more or less friction has arisen from time to time between the secondary schools and the higher institutions over the recognition of the foreign languages, the sciences and the vocational subjects. These statements will, in a measure, explain why the treatment of the last three groups of subjects has been provided for in the table.

Column one is largely self-explanatory and shows that thirty-six of the thirty-nine state universities have fixed their standards of admission from fourteen to sixteen units. The three institutions having lower requirements announce that they expect to increase their standards of admission as fast as the conditions of the high schools will permit. One question seems to be settled here, and that is, that admission by state universities will henceforth be based upon the average amount of work that can be done by a pupil in a good high school in four years.

From the standpoint of a realization of the standards announced, the facts given in the second vertical column of the table are not so gratifying. Three classes of institutions are

represented: those still maintaining preparatory departments, those which do not definitely announce the numbers of "conditions" allowed, and those stating the maximum numbers of units in which students may be conditioned. The universities having preparatory departments are largely found in the newer states where the high schools are less developed. As shown in Chapter III, the universities of the Middle West made little real progress in adjusting themselves in their state systems until they threw the preparatory work upon the high schools and began to assist in their development. The second group of institutions, those not stating definitely the numbers of "conditions" allowed, may be one step ahead of the first group. Until institutions are willing to announce their exact numbers of "conditions" they are in danger of making little progress in advancing their own standards and the standards of the schools below them. Those institutions stating the exact numbers of "conditions" allowed may reach their announced requirements by fidelity in administration and by a steady movement forward.

The statement must be made in the light of the facts given in column two, and some supplementary facts here submitted, that, with one or two doubtful exceptions which have had comparatively little to do with developing the certificating system, not a single state university was meeting its own announced standards in 1911. Seven institutions supported preparatory departments, twenty-one announced one or more "conditions," leaving eleven not definitely accounted for in the table. In these eleven, "conditions" were treated as follows: in California, the number of "conditions" was decided in each case by the academic senate; in Indiana, students were admitted with "conditions" but the numbers were not given; in Maine and Vermont, "conditions" were not stated in catalogues; in Illinois, a preparatory department was maintained until 1911; in Missouri, students were "admitted conditionally at the discretion of the Dean of the University Faculty"; in Nevada, "conditions" were determined by the Committee on Admission; in North Dakota, a "Model High School" was attached; in Oklahoma, students were admitted on three years of high school

work; in South Carolina, only eleven units were announced for admission in 1911 and no statement was made concerning "conditions"; in Wisconsin, one "optional unit" was allowed. By "optional unit" is here meant any work taken in high schools.

The conclusion may be repeated that, so far, state universities are not yet meeting the standards to which they aspire. This may argue that the effort to keep admission requirements within reach of the high schools is general among the higher state institutions.

The prescribed requirements vary widely with the different colleges. The requirements for admission to the courses leading to the degrees of "Bachelor of Arts" and "Bachelor of Science" have been selected for use in the table for the reason that it is believed that these have had most to do in the establishment of entrance requirements and also have most influenced high school courses in the past. In some institutions no "Bachelor of Science" degree is awarded, hence the absence of data in several cases. The small numbers of prescribed subjects made by such institutions as Illinois, Iowa, Minnesota, Missouri, Michigan and Wisconsin might be interpreted as pointing to a desire to establish a close interrelation between the schools and the higher institutions in those states.

The facts submitted concerning prescribed requirements in foreign languages and sciences and the maximum numbers of units allowed for vocational subjects are largely self-explanatory. Attention should be called to the fact that in some instances the prescribed requirements are nullified by "conditions" allowed.

The facts in Table XIV seem to justify the following conclusions:

1. State universities have settled down to a four-year high school basis as a proper standard for the establishment of college admission requirements.
2. No state university striving to cooperate fully with the high schools of its own state has so far been able to enforce in full its own announced requirements. The status of the development of the high schools in the different states is reflected in

the entrance requirements of universities not supporting preparatory departments.

3. While most of the state universities announce some prescribed requirements in foreign languages, "conditions" allowed have postponed the full enforcement of the requirements. The results of the enforcement of foreign language requirements upon the schools are yet to be determined.

4. The table shows that state universities are rendering assistance in the development of the sciences and vocational subjects. Sixteen institutions make a specific science requirement for admission to bachelor-of-arts courses. All but three of the thirty-nine institutions accept one or more units of vocational work for admission to one or more courses.

Observations Based on Table XV

Table XV needs little explanation. It was compiled to show the relation of the state universities to the high schools as manifested in the amounts of different high school subjects accepted for admission.

In the previous table the maximum numbers of units accepted in vocational subjects were shown. Table XV presents, along with others, the credits assigned to the different vocational subjects. It will be seen that some of the institutions give a wide range of options but limit the total numbers of credits that may be offered. This same condition does not prevail in the cases of the foreign languages and sciences. No restriction is placed upon the numbers of units that may be offered from those accredited. This discrimination against the new group of subjects suggests lack of confidence in their power to train for col-

lege or a lack of efficiency in their organization and teaching. However, the fact that they are being credited by thirty-six state universities, and to the extent shown in Table XV, should be pleasing to the supporters of these subjects.

To those who may be interested in the exact status of any particular subject, or in a comparison of the practices of different institutions, Table XV should be of value.

TABLE

MAXIMUM OF CREDITS IN DIFFERENT SUBJECTS ALLOWED FOR

Subjects	States																	
	Ala.	Ark.	Ariz.	Cal.	Colo.	Fla.	Ga.	Idaho	Ind.	Ill.	Ia.	Kan.	Ky.	La.	Me.	Minn.	Mo.	
1. Agriculture.....	2	1		1	1	1	1	2	?	2		$\frac{1}{2}$	$\frac{1}{2}$	1		4	1	
2. Algebra.....	$1\frac{1}{2}$	2	$1\frac{1}{2}$	2	$1\frac{1}{2}$	2	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	2	$1\frac{1}{2}$	$1\frac{1}{2}$	2	$1\frac{1}{2}$	2	
3. Astronomy.....	$\frac{1}{2}$									$\frac{1}{2}$						$\frac{1}{2}$		
4. Arithmetic.....	$\frac{1}{2}$										$\frac{1}{2}$					$\frac{1}{2}$		
5. Biology.....	1			1		?		1							1			
6. Botany.....	1	1	1	1	1		1	1	1	1	$\frac{1}{2}$	1	1	1	1	1	2	
7. Book-keeping....										1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1		1	1	
8. Chemistry.....	2	$\frac{1}{2}$	1	1	1	1	1	1	1	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	1	1	2	
9. Civics.....	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$			$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	$\frac{1}{2}$		$\frac{1}{2}$	
10. Com. Subjects...								1		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		2	2		
11. Drawing.....	1	1		2	1					1		1	1			1	2	
12. Domestic Ec....				2	1			2				1	$\frac{1}{2}$			$1\frac{1}{2}$	2	
13. English.....	$3\frac{1}{2}$	3	4	4	4	3	4	4	3	4	3	4	3	3	3	4	4	
14. Economics.....				3	$\frac{1}{2}$					$\frac{1}{2}$	$\frac{1}{2}$	1				$\frac{1}{2}$		
15. French.....	2	3	2	4	2	1	2	2	3	4	3	3	3	3	2	2	3	
16. Geometry, P....	1	1	$\frac{1}{2}$	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
17. Geometry, S....	$\frac{1}{2}$			$\frac{1}{2}$	$\frac{1}{2}$		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	
18. German.....	2	3	2	4	2	1	2	2	3	4	3	3	3	3	2	2	3	
19. Geography.....				$\frac{1}{2}$	$\frac{1}{2}$					$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		1		$\frac{1}{2}$	$\frac{1}{2}$	
20. Geology.....	$\frac{1}{2}$								1	1			1			$\frac{1}{2}$		
21. Greek.....	2	3	2	3	2		$1\frac{1}{2}$	2	3	3	2	3	3	2	3	2	3	
22. History.....	$3\frac{1}{2}$	4	$3\frac{1}{2}$	$3\frac{1}{2}$	4	4	$3\frac{1}{2}$	$3\frac{1}{2}$	$2\frac{1}{2}$	3	2	4	$3\frac{1}{2}$	3	$1\frac{1}{2}$	3	4	
23. Latin.....	3	4	4	4	4	3	3	4	2	4	4	4	4	3	4	4	4	
24. Manual Tr....	2	1	2	2	2		2	2	?	2		1	$\frac{1}{2}$	3	1	3	2	
25. Physics.....	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
26. Physiography...	1	1	1	1	?	1	1	?	?	1	?	1	$\frac{1}{2}$	1	1	$\frac{1}{2}$	1	
27. Physiology.....	$\frac{1}{2}$	1		1			$\frac{1}{2}$	?	?	1	?	1	1	1	$\frac{1}{2}$		
28. Spanish.....	2		2	2	2	1	1			2			3	3		2	3	
29. Sten. & Typwg..				2											1	2		
30. Trigonometry...			$\frac{1}{2}$	$\frac{1}{2}$					?			$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$		$\frac{1}{2}$
31. Zoology.....	$\frac{1}{2}$	1			?	1	1	1	1	1	?	1	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1	2	
32. Miscellaneous...	$1\frac{1}{2}$	$1\frac{1}{3}$		4	$2\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$1\frac{1}{2}$		$1\frac{1}{2}$	$1\frac{1}{2}$	$2\frac{1}{2}$		$2\frac{1}{2}$	$1\frac{1}{2}$	

¹ Compiled from Catalogues for 1910-1911. ² Music. ³ Psychology and Pedagogy. ⁴ Music, Analytic Geometry. ⁵ Psychology and Science. ⁶ Italian. ⁷ Any high school subject. ⁸ Psychology and Pedagogy. ⁹ Surveying and Teaching. ¹⁰ Music. ¹¹ Scandinavian.

XV¹

ENTRANCE BY THIRTY-NINE STATE UNIVERSITIES IN 1911

[illegible]

¹²Surveying and Mississippi History. ¹³Industrial Subjects. ¹⁴Any approved high school subject. ¹⁵Music, Psychology, School Management, Scandinavian and Senior Reviews. ¹⁶Psychology and 6 units in science not distributed. ¹⁷Music, Oral expression, Bible History, Education, Psychology. ¹⁸"Optional subject." ¹⁹Psychology and Pedagogy.

TABLE XVI¹

SUBJECTS CREDITED FOR ADMISSION BY THIRTY-NINE STATE UNITIES WITH NUMBERS OF INSTITUTIONS ACCEPTING EACH

Subjects	Institutions	Numbers
1. Agriculture.....	All <i>except</i> Ariz., Ia., Me., Miss., Mich., Mont., N. M., N. C., Ore., S. C., S. D., Va., Wy.....	26
2. Algebra.....	All.....	39
3. "Any High School Subject".....	Ind. (5 units), Neb., N. M., Wis. (1 unit)	4
4. Analytic Geom....	Cal.....	1
5. Advanced Arith....	Ala., Ia., Minn., Mo., N. M., Ore., Wash.	7
6. Astronomy.....	Ala., Ill., Minn., Ore., Wash.....	5
7. Biology.....	Ala., Cal., Idaho, Me., Mo., Mich., Mont., N. M., N. D., O., Ok., Tenn., Vt., Va.	14
8. Bible History.....	Utah.....	1
9. Botany.....	All.....	39
10. Book-keeping.....	Cal., Ill., Ia., Kan., Ken., La., Minn., Mo., Nev., N. M., Ore., S. D., Tex., Utah, Wash., Wy.....	16
11. Chemistry.....	All.....	39
12. Civics.....	All <i>except</i> Colo., Fla., Mich.....	36
13. Commercial Sub- jects not speci- fied elsewhere....	N. D., Ok., Utah, Wash., Wis., Cal., Idaho, Ill., Kan., Minn., Mont.....	11
14. Drawing.....	All <i>except</i> Ariz., Fla., Idaho, Ind., Ia., La., Me., Neb., S. D., Wis., Wy....	28
15. Domestic Economy	Cal., Colo., Idaho, Ill., Kan., Ky., Minn., Mo., N. D., O., Ok., Tenn., Tex., Utah, Wash., Wis., Wy.....	17
16. English.....	All.....	39
17. Economics.....	Cal., Colo., Ill., Ia., Kan., Minn., Mo., N. D., Ok., Ore., S. D., Utah., Wash., Wis., Wy.....	15
18. French.....	All.....	39
19. Geometry, P.....	All.....	39
20. Geometry, S.....	All <i>except</i> Ark., Fla., Ga., Ia., N. M....	34
21. German.....	All.....	39
22. Geography, Com..	Ala., Cal., Colo., Ill., Kan., La., Minn., Mo., N. M., Ok., Utah, Wash., Wis....	13
23. Geology.....	Ala., Ind., Ill., Ky., Minn., Ore., Utah, Wash., Wis.....	9
24. Greek.....	All <i>except</i> Fla., Mont.....	37
25. History.....	All.....	39
26. Latin.....	All.....	39
27. Manual Training..	All <i>except</i> Ariz., Fla., Ia., Mich., Mont., N. C., S. C., S. D., W. Va.....	30
28. Music.....	Ala., Cal., Idaho, La., Mo., N. D., Tenn., Utah.....	8
29. Pedagogy.....	Ark., Kan., Ky., N. D., Utah, Wy....	6
30. Physics.....	All.....	39
31. Physiography.....	All <i>except</i> Mont.....	38
32. Physiology.....	All <i>except</i> Ariz., Fla., Mich., Mont., Va.	34
33. Psychology.....	Ark., Colo., Kan., N. D., S. D., Utah, Wy.	7
34. Scandinavian.....	Minn., N. D.....	2

¹Compiled from Table XV.

TABLE XVI—Continued

Subjects	Institutions	Numbers
35. Spanish.....	All <i>except</i> Ark., Idaho, Ind., Ia., Kan., Me., Mich., Mont., Neb., Ore., S. D., W. Va., Wy.....	26
36. State History.....	Miss.....	1
37. Sten. & Type.....	Cal., La., Minn., N. M., Tex., Vt., Wy.	7
38. Surveying.....	Ky., Miss.....	2
39. Trigonometry.....	All <i>except</i> Ala., Ark., Colo., Fla., Ga., Idaho, Ind., Ill., Ia., Minn., Neb., N. D., Wy.....	26
40. Zoology.....	All <i>except</i> Ariz., S. C.....	37

Observations Based on Table XVI

A recapitulation of Table XV has been made in Table XVI for the purpose of presenting in brief form the spread of subjects recognized in the different states.

Algebra, Botany, Chemistry, English, French, Plane Geometry, German, History, Latin, and Physics are accepted by all of the institutions. Distributed according to the groups previously named, two branches fall under mathematics, three under foreign languages, and three under science, with English and History groups fully represented. The only group not having a unanimous choice of one or more of its subjects is that of vocational subjects. In that group Manual Training is accredited to some extent by thirty institutions, while Domestic Economy is accepted by seventeen. Agriculture ranks next to Manual Training and Drawing. Commercial subjects are accepted by about one-third of the institutions.

From Table XVI the conclusion may be drawn that so far as five of the six groups of subjects are concerned they are being encouraged by the colleges and that representatives of the sixth group are growing in favor.

Legal Enactment and Certification

One of the most important problems connected with the entire system of admission to college by certificate has arisen in connection with legislative enactments. So long as the higher institutions maintained preparatory departments and did not attempt to enforce strict entrance requirements, laws compelling them to accept graduates of high schools meeting certain minimum standards of efficiency would naturally create little concern. But as the universities come to insist upon a higher grade of preparation for college work, legal enactments seem to bar the way to

advancement. At no other time in the entire history of certification has this question been as crucial as it is at present.

No attempt will be made to describe the various conditions prevailing in all of the states. In some of the states, especially in the Middle West where free public high schools are best developed, a more or less unsettled condition prevails, due to enactments attempted, passed or contemplated. In some cases decisions of attorneys-general have been invoked, in others the state universities are attempting to forestall complete loss of control of their entrance requirements by suggesting the creation of state high school boards, to be composed largely or wholly of representatives of the higher educational institutions, and in still other states the colleges are trusting for protection to charters and state constitutions.

The laws, which the highest institutions believe to be detrimental to the improvement of entrance requirements, may be classified under three heads: (1) those which place the entire control of admission requirements in the hands of state departments of education; (2) those which bind the stronger and the weaker institutions together and thus permit the weaker colleges to impede the progress of the stronger ones; and (3) those laws which have for their purpose the entire removal of the right of school visitation from state universities.

As illustrations of these types, the laws of South Dakota, Florida, Missouri, and Ohio may be cited.

1. "He (State Superintendent) personally or by an assistant shall inspect all high schools and shall have the power to accredit them to higher institutions of learning."³⁰

Another illustration of this same type is found in Missouri.

"The state superintendent of public schools shall have authority to classify the public high schools in the state into first, second and third classes, and shall prescribe minimum courses of study for each class. . . . All work completed in an accredited high school shall be given full credit in requirements for entrance to and classification in any educational institution supported in whole or in part by state appropriations."³¹

2. "Immediately after the passage and approval of this act, the State Superintendent of Public Instruction shall appoint a

³⁰ The School Law of South Dakota (1909), Article I, Section 3.

³¹ Revised School Laws of the State of Missouri (1909), Article VII, Section 10,923.

committee of not less than six nor more than ten of the most capable persons, of whom not less than one-third shall be presidents or principals of state institutions for higher education, and not less than one-third shall be principals of high or graded schools, and these, together with himself, at the earliest practicable date, shall prepare a standard course of study for high school grades. Said course of study shall prescribe minimum requirements, and shall be arranged, as far as practicable, to secure equality of mental power and training among those completing its instruction, and to insure suitable preparation for entrance into the lowest college classes of the state institutions for higher education. . . .”³²

3. As previously stated in the last chapter a determined effort was made by the State Department of Education of Wisconsin, in 1911, to have a law enacted by the Legislature forbidding the state university to inspect high schools.

A similar contest has been precipitated in Ohio.

The following quotations are taken from a law passed by the Ohio State Legislature March 12, 1909:

“The standing or grade of all public high schools in the state shall be determined by the state commissioner of common schools and his findings in reference to the standing or grade of such high schools shall be final.”³³

“To aid in the recognition and classification of high schools, established or seeking recognition in accordance with the provisions of this act, the state commissioner of common schools shall appoint two competent inspectors. . . . provided, however, that the inspection herein authorized shall not be a substitute for, or take the place of, the inspection made by the Ohio State University.”³⁴

The statute quoted was revised, April 11, 1911, and the clause insuring the right of inspection to the university was omitted.

The effect of the three types of laws quoted will be discussed in the next chapter.

Chapter Summary

It has been the purpose in this chapter to set forth actual conditions and practices rather than to discuss the advantages and weaknesses of the systems described.

³² Digest of the School Laws of the State of Florida (1909), p. 38.

³³ General Statutes, Section 4029-4.

³⁴ General Statutes, Section 4029-4a.

A general survey of the field reveals the existence of certain type systems used in administering the plan of admission to college by certificate. Each of these types possesses certain distinctive features but all may be examined from the standpoints of the locations of control and inspection.

The types of control and inspection described are illustrated: (1) in the New England College Entrance Certificate Board; (2) in the State Board of Education of Indiana; (3) in the High School Board of Minnesota; (4) in the Association of Alabama Colleges; (5) in the State Universities of Texas and Missouri; (6) in the State Departments of Education of New York, South Dakota and Florida; (7) in the joint control of the University and the State Department of West Virginia; (8) in the special plans of Vanderbilt, Harvard, Columbia and Chicago Universities; (9) in the district control of the Commission on Accredited Schools and Colleges of the North Central States; and (10) in a system of reciprocity established between state universities. The distinctive features of these types are summarized in each case after the different systems are explained.

The different methods used in testing schools are treated under four heads: (1) reports, (2) inspection, (3) formal examination of high school pupils, and (4) records of students in college.

Tables XIV, XV, and XVI lead to the conclusions that the colleges have settled upon a four-year high school course as the proper basis for determining the standard for admission; that none of the state universities are yet meeting their own announced standards; and that five of the six groups of subjects taught in high schools are recognized generally for admission, and that the sixth group, or that of vocational subjects, is coming into favor.

Three types of legal enactments are becoming grave factors in the general problem of certification. All of these types are detrimental to the fundamental principles of certification in that they tend to take from the higher institutions the control of their own entrance requirements and also deprive the schools and colleges of the opportunity of free cooperation in adjusting the connection between the two parts of the educational system.

CHAPTER V

EVALUATIONS AND CONCLUSIONS

So far, in this study, an effort has been made to present an outline of the origins, developments, and present conditions of the various systems of college certification used in the United States. The task remains to analyze the advantages and weaknesses of the systems indicated with a view to rendering some aid in strengthening prevailing methods.

Admission to college by certificate, in forty years, has largely supplanted admission by examination. What has caused this change of plans? To answer the question, a comparison must be made of the rival systems of certification and examination.

The most fundamental difference between admission by examination and admission by certificate seems to exist in the fact that in the former plan the fitness of the applicant is tested by a few questions set by persons who know little or nothing of the candidates personality or training, while in the latter case those who have taught the prospective student, one or more years, are called upon to pass judgment on his ability to do college work. Which is the more reliable method? Certain statistics will be presented as a basis for the conclusions which follow.

The figures submitted in Table XVII show that students admitted on certificate to the colleges working under the New England College Entrance Certificate Board for four years made three per cent fewer failures in their first term of college work than did the students admitted on examination. The difference in favor of the certificated students for 1909-1910 was two and three-tenths per cent. On account of a change in the form of the report on Mathematics the figures do not fit into the table and are omitted solely for that reason.

It must be concluded from these figures that the judgment of those who prepare students for New England colleges is a more trustworthy guide in the actual selection of students than the

TABLE XVII

DATA CONCERNING THE FAILURES OF STUDENTS ADMITTED TO NEW
ENGLAND COLLEGES BY EXAMINATION AND CERTIFICATE FOR
THE SCHOLASTIC YEARS, 1906¹, 1907², 1908³, AND 1909⁴

	Eng.	Lat.	Gk.	Fr.	Ger.	Math.	Totals
Admitted on Ex., 1905-06.....	310	246	74	218	125	318	1300
Admitted on Cert., 1905-06.....	961	794	324	651	417	927	4074
No. Ex. Students failed 1st term....	28	7	3	11	11	48	108
No. Cert. Students failed 1st term....	71	29	8	41	18	98	265
Per cent Ex. Students failed 1st term.	8.8	2.8	4.1	5.	8.8	15.1	8.3
Per cent Cert. Students failed 1st term	7.4	3.7	2.5	6.3	4.3	10.6	6.5
Admitted on Ex., 1906-07.....	333	254	66	245	146	388	1432
Admitted on Cert., 1906-07.....	1021	807	274	757	478	940	4277
No. Ex. Students failed 1st term....	27	16	6	17	12	61	139
No. Cert. Students failed 1st term....	86	32	8	44	14	127	311
Per cent Ex. Students failed 1st term.	8.1	6.3	9.1	7.	8.2	15.7	9.7
Per cent Cert. Students failed 1st term	8.4	4.	2.9	5.8	2.9	13.5	7.2
Admitted on Ex., 1907-08.....	314	238	56	201	139	347	1295
Admitted on Cert., 1907-08.....	1047	870	242	829	521	1011	4520
No. Ex. Students failed 1st term....	29	13	3	21	14	77	157
No. Cert. Students failed 1st term....	82	32	7	55	41	138	355
Per cent Ex. Students failed 1st term.	9.2	5.5	5.3	10.4	10.1	22.2	12.1
Per cent Cert. Students failed 1st term	7.8	3.7	2.9	6.6	7.9	13.6	7.8
Admitted on Ex., 1908-09.....	393	259	43	326	174	436	1631
Admitted on Cert., 1908-09.....	1161	960	275	846	621	1104	4967
No. Ex. Students failed 1st term....	35	11	1	34	6	84	171
No. Cert. Students failed 1st term....	85	33	4	39	39	136	336
Per cent Ex. Students failed 1st term.	8.9	4.2	2.3	10.4	3.4	19.3	10.4
Per cent Cert. Students failed 1st term	7.3	3.4	1.5	4.6	6.3	12.3	6.7
Average per cent of failures by Ex. students in 4 years.....							10.1
Average per cent of failures by Cert. students in 4 years.....							7.1
Per cent of advantage in favor of Cert. students.....							3.

¹ Fourth An. R. New England College Entrance Certificate Bd., p. 9.

² Fifth An. R. New England College Entrance Certificate Bd., p. 8.

³ Sixth An. R. New England College Entrance Certificate Bd., p. 9.

⁴ Seventh An. R. New England College Entrance Certificate Bd., p. 9.

entrance examinations passed by those who are not admitted by certificate.

The conclusion drawn may be qualified by the statement that the New England plan is a restricted type of the certifying system, and that the certifying teachers are often in fear of losing the privilege should they be careless or make mistakes. This feature will be considered in another connection, but the fact remains that the judgment of the teachers, thus safeguarded, is more reliable than examinations as both are applied by New England colleges.

The question will be further studied with the use of Table XVIII which follows.

Before suggesting the conclusions which may be drawn from Table XVIII, it will be advantageous to relate certain facts bearing upon the statistics submitted.

TABLE XVIII^a

NUMBERS OF STUDENTS AND PERCENTAGES OF WORK DONE IN FIVE GRADES OF SCHOLARSHIP BY FRESHMEN, IN THE UNIVERSITY OF CALIFORNIA, COMING FROM THE STATE HIGH SCHOOLS

Years	Nos. of Students	Five Grades of Scholarship				
		I	II	III	IV	V
1901	383	8.85	45.20	30.12	13.17	2.67
1902	458	9.87	40.10	33.80	14.10	2.20
1903	401	9.26	39.25	38.75	10.80	1.96
1904	455	12.20	40.38	35.47	10.45	1.65
1905	391	13.60	36.86	38.69	9.72	1.13
1906	431	11.75	40.07	35.06	11.03	2.09
1907	428	14.30	38.96	30.80	13.48	2.45
1908	472	13.98	37.09	36.00	11.06	1.87
1909	546	14.87	40.88	33.34	9.44	1.43
Averages		12.08	39.86	34.67	11.47	1.94 ^a

In 1884, the University of California began to accredit high schools and to admit students on certificate.⁶ For a little more than twenty years thereafter the schools were visited by members of the Faculty. The schools were accredited by subjects and not by schools. In June, 1903, a general examiner of schools was appointed, and about three years later special examinations by members of the Faculty were discontinued.⁷

The rapid increase in the number of schools needing visitation and the utter inability of one man to do the work led the Examiner of Schools, Professor W. Scott Thomas, to devise the California plan for testing the work of the schools. That plan is set forth in the last chapter of this study. While the schools are still visited by the Examiner their efficiency is more or less tested by the work of their graduates in the freshman class of the University of California. Thus California, while retaining the element of school visitation, has drifted somewhat to the system used by the New England College Entrance Certificate Board.

Table XVIII contains data compiled by the California Examiner of schools. These statistics would be far more valuable

^a The statistics in this table are taken from the Biennial Report of the President of the University of California for 1908-10, pp. 154-5.

⁶ See Report of Examiner of Schools: Biennial Report of the President of the University of California, 1906-08, p. 118.

⁷ *Ibid.*, p. 119.

for our immediate purpose if similar ones accompanied them in regard to students admitted on examination. It seems not unlikely that only a comparatively small number of students enter the University of California on examination, and hence the absence of reference to them.

The facts given are valuable. Grades of scholarship IV and V represent unsatisfactory work. Those classed in Grade V must repeat the courses. When the percentages of these two grades are added together, a total of 13.41 is obtained. It will thus be seen that 86.59 per cent of the work of the graduates of the California high schools who go to the University is at least passable. As stated, no comparison of those entering on examination is possible on account of lack of data.

Although the conditions are widely different, it will be of interest to compare the facts submitted in Table XVIII with those contained in the table for New England Colleges. It was found that of those admitted on examination to the New England colleges, for four years, an average of 10.1 per cent failed and 89.9 per cent passed; and of those entering by certificate, for the same period, an average of 7.1 per cent failed and 92.9 per cent passed. Thus the California certificated students for nine years fall somewhat below the New England students for four years. Taking from Table XVIII the percentages representing unsatisfactory work for the same period of time for which the New England reports are reckoned, the figures show that 11 per cent are found under the grades of work representing failure on examinations but permitting a second trial, while 1.96 per cent of the work was so poorly done as to require full repetition. Adding together these percentages, a total of 12.96 per cent is obtained. It is not stated in the New England report whether or not failures in examinations always mean a repetition of work. This would be a considerable factor in the comparison about to be made. Assuming that all failures in New England are final, the figures stand:

New England Certificated students passed....	92.9 Per Cent;
California students passed.....	87.04 Per Cent;
New England Examination students passed...	89.9 Per Cent.

The California students fall 5.86 per cent below the New England certificated students but only 2.86 per cent below the New

England examination students. It is believed that in this comparison every advantage is given to the New England students. If California certificated students could be compared with examination students of the same state, it is believed that the certificated students would not suffer in the comparison.

Unfortunately, it has not been possible to obtain recent data for use in this particular discussion from any of those universities which have had most to do with the development of the purest type of the certifying system. The reason is that the system has almost eliminated admission by examinations in the Middle West. Examinations are set each year by the different universities but the number of students applying for them has become almost a negligible quantity.

We do have, however, thanks to the University of Michigan, a most accurate and painstaking report upon the relative standings of certificated and examined students in college, although we must go back to 1880 for it.

When the University of Michigan had been admitting students on certificate for five years, or in 1876, a committee of the Faculty was appointed to make a report on the comparative standings of certificated and examined students. A report was made showing that the certificated students were doing as well in college work as those admitted on examination. Again, in 1880, a committee of the Faculty, composed of the professor of Latin, the professor of Mathematics, and a professor of Science, was appointed to make a full investigation of the standings of students admitted by certificate and those admitted by examination for nine years, or from the date of the introduction of the certifying system.

The report of that committee may still be found in the archives of the University. Different references have been made to it and the conclusions have been stated in print, but the report itself has never been published. The full weight of the report has never been felt except by those who have examined it. The conclusions are based upon the most convincing statistics. Thirty-two tables of figures are given based upon the complete college records of 1161 students, of whom 514 were admitted on certificate and 647 were admitted on examination.

The conclusions of the committee deal with three considera-

tions: (a) students making exceedingly bad records, (b) those dropping out without making any records, and (c) a percentage comparison of the records of certificated and examined students remaining in college.

TABLE XIX¹
PERCENTAGE COMPARISON OF THE RECORDS OF CERTIFICATED
AND EXAMINED STUDENTS

	Percentage
Certificated students making bad records.....	10.15
Examined students making bad records.....	9.51
Advantage of examined students.....	.64
<hr/>	
Certificated students making no record.....	10.89
Examined students making no record.....	13.13
Advantage of certificated students.....	2.24
<hr/>	
Success of certificated students, 1878-1880.....	90.56
Success of examined students, 1878-1880.....	89.61
Advantage of certificated students.....	.95
<hr/>	
Success of certificated students, 1871-1878.....	88.36
Success of examined students, 1871-1878.....	86.50
Advantage of certificated students.....	1.86

¹ The data in this table were copied from the report of the Faculty Committee, on file in the archives of the University of Michigan.

The figures in Table XIX show that for nine years the certificated students surpassed the examined students in the University of Michigan in percentages of success in college work and in remaining in college long enough to have some sort of records. The certificated students made sixty-four hundredths of one per cent more exceedingly bad records than did the examined students. It is noted in the report that only 49 diploma students and 56 examined students made very bad records in the nine years covered by the investigation.

The data submitted from the New England colleges and from the University of Michigan furnish conclusive evidence that the judgment of teachers in the selection of students for college is superior to formal entrance examinations. It should be noted that this conclusion is not based upon mere opinion but upon recorded facts.

It may be claimed that, so far, mere ability to remain in college and to do the lowest grade of work required has formed the basis of the judgments given. Happily, two studies have been made bearing upon this point.

In 1906, Dr. E. L. Thorndike made an exhaustive examination of the records of 253 students who entered Columbia College in 1901, 1902 and 1903, and who had passed the examinations of the College Entrance Examination Board:⁸ The records were traced as far as they were recorded through the freshman, sophomore, junior and senior years. Dr. Thorndike was led to the conclusion that the grades made on entrance examinations indicate only to a very slight degree the grade of work that any student will do in college. He states: "If, knowing that 50 individuals ranked in the order, Jones, Smith, Brown, etc., in their entrance marks, one were to wager that in the college work of, say, junior year, they would rank Jones, Smith, Brown, etc., as before, he would lose his bet in 47 cases out of the 50."⁹

The same author touches upon another vital point involved in the problem of admission by certificate when he says: "The general inadequacy of the entrance examinations from which the colleges suffer is not so important as their enormous individual inaccuracies, from which individual students suffer."¹⁰ In his study he found that: "Had the passing mark been set the least bit higher, one of the very best students of the three college classes would have been debarred from entrance."¹¹

Dr. W. F. Dearborn who made a study of the school and college grades of all of the students entering the University of Wisconsin from the high schools of six cities for the years 1900-1905, inclusive, states: "A little over 80 per cent of those who were in the lowest or highest quarter of the group in high school are found in their respective halves of the group throughout the university. . . . We are safe in concluding that three-fourths of the students who enter the university from these high schools will maintain throughout the university approximately the same rank which they held in high school."¹²

Professor Dearborn found "no evidence that the student

⁸ *Educational Review*, Vol. 31, 1906, pp. 470 *et seq.*

⁹ *Ibid.*, p. 472.

¹⁰ *Ibid.*, p. 473.

¹¹ *Ibid.*, p. 473.

¹² The Relative Standing of Pupils in the High School and in the University: Bulletin of the University of Wisconsin, High School Series, No. 6, p. 41.

who stands lowest in his class and barely gets accredited to the university is at all likely to lead his class in the university.¹³

The study cited closes with the statement: "This investigation indicates very clearly that the previous rank of pupils in the accredited schools furnishes a satisfactory means for forecasting the likelihood of successful work at the university."¹⁴

The five sources given,—the annual reports of the New England Board, the report of the High School Examiner of California, the report of the Michigan Faculty, the study of the records of Columbia College students and the investigation conducted at the University of Wisconsin,—all lead to the conclusion that the certificating system is more reliable than the college entrance examination in the selection of students for college, whether considered from the standpoint of the welfare of students and the schools or from the view-point of the standards of the higher institutions.

The Influence of Certification Upon College Admission Requirements

The exact amount of change in entrance requirements due solely to admission by certificate can not be mathematically estimated. It is possible, however, to gain some knowledge of the influence of the new system in the changes which have taken place since it was introduced, by making certain comparisons of previous and existing conditions.

In 1870, Harvard, Yale, Columbia, and Princeton Universities required certain forms and amounts of the following subjects for admission: Latin, Greek, Arithmetic, Algebra, Plane Geometry, Geography, and the elements of English. Harvard added to this list a little Ancient History and Physical Geography.¹⁵

Thus three of the colleges based their entrance requirements entirely upon seven subjects while Harvard added two others making a total of nine for the last named institution.

In 1911, the subjects required or accepted by these same institutions are named in Table XX.

¹³ Bulletin of the University of Wisconsin, High School Series, No. 6, p. 42.

¹⁴ *Ibid.*, p. 44.

¹⁵ E. C. Broome, A Historical and Critical Discussion of College Admission Requirements, p. 53.

TABLE XX

SUBJECTS REQUIRED OR ACCEPTED FOR ADMISSION BY HARVARD,
COLUMBIA, YALE AND PRINCETON UNIVERSITIES IN 1911

Harvard¹

English, Greek, Latin, German, French, History, Algebra, Plane Geometry, Solid Geometry, Trigonometry, Physics, Chemistry, Geography, Anatomy, Astronomy, Botany, Zoology, Drawing, Civil Government, Economics, Music and Manual Training.	
Total	22

Columbia²

English, Greek, Latin, German, French, History, Algebra, Plane Geometry, Solid Geometry, Trigonometry, Physics, Chemistry, Geography, Botany, Zoology, Drawing, Music, Italian, Spanish and Manual Training. Total	20
---	----

Yale³

English, Greek, Latin, German, French, History, Algebra, Plane Geometry, Solid Geometry, Trigonometry, Physics, Chemistry and Civil Government. Total	13
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Princeton⁴

Same as those required or accepted by Yale. Total	13
---	----

¹ Harvard College Catalogue, 1911-12, pp. 471-473.

² Columbia University Catalogue, 1911-12, p. 179.

³ Yale University Catalogue, 1910-11, p. 82.

⁴ Princeton University Catalogue, 1911-12, pp. 76-77.

While History has gained a place among the subjects accepted by each of the four colleges, there is a restriction upon the amount that may be offered at Yale and Princeton and in none of the four can such an amount be offered as is taught in the high schools of the Middle West. All four of the colleges accept Solid Geometry and Trigonometry, which are mere additions to the Mathematical subjects required in 1870. The acceptance of French, German, Physics, and Chemistry may be regarded as a recognition of new fields. Harvard and Columbia have gone much farther in the acceptance of new subjects than have Yale and Princeton. The addition of such subjects as Botany, Zoology, Drawing, Italian, Spanish, Music, and Manual Training indicates a certain response in sympathy with the trend in the lower schools.

Turning to Table XV it will be seen that California recognizes 30 subjects for admission; Illinois, 27; Minnesota, 29; Wisconsin, 26; and Missouri, 29. Not only in numbers of subjects but in kinds of subjects and in the amounts credited do the certificating universities differ from those which admit only

on examination. More of the modern languages, more of the sciences and more of the vocational subjects are accredited by the state institutions named than are recognized by those institutions admitting students largely by entrance examinations.

The average number of subjects accepted by the four colleges named, admitting on entrance examination, is 17; the average number of subjects recognized by California, Illinois, Minnesota, Missouri, Michigan, Texas and Wisconsin is about 26. This is twice the number accepted by Yale and Princeton, four more than Harvard and seven more than Columbia.

Not only in the number of subjects credited but in the liberties given in the matter of options do the certificating institutions surpass the non-certificating colleges.

The more important influences of the certificating system upon entrance requirements are manifested in the following ways: (1) in the larger number of subjects recognized; (2) in the greater liberty in the selection of accredited subjects which may be presented; (3) in the larger numbers of units allowed in history, in modern languages, and in sciences; and (4) in the recognition of vocational subjects.

The Influence of Certification Upon Methods of Teaching

However important may have been the changes in college entrance requirements in the last forty years, they do not seem greater than the improvements in methods of teaching. These improvements have appeared alike in the colleges and in the high schools. It is not always determinable just where the newer and better methods have originated; but certain it is that where the higher and lower institutions have been tied together by the plan of certification a much better opportunity has been afforded for a quick and complete communication of any improvement in methods of work, originated in either the schools or the colleges.

No better formulation of one of the most valuable characteristics of the new system need be given than is found in the second report of President Frieze, on this question, submitted to the Board of Regents of the University of Michigan, July 11, 1871. He then stated: "The principle of this movement is obvious: we go back to the schools, and aid their in-

structors in devising correct plans and laying solid foundations of scholarship; instead of waiting until pupils present themselves at the University, prepared under dissimilar, and, perhaps, erroneous systems, often imperfectly prepared, and sometimes rejected for deficiencies, which could have been avoided by this previous interchange of views between the Faculty and the preparatory teachers."¹⁶

President Frieze knew, and those who examine the catalogues and announcements of institutions admitting only on examination may know, that, usually, such colleges content themselves with announcements of outlines concerning their entrance requirements. They would stand at their own doors with a sort of measuring stick and largely disclaim responsibility for the methods used in the lower schools. They have been loath to admit that they might obtain suggestions from the schools which would in any great measure redound to their own benefit.

It is not claimed that all colleges using the certificating system do assist the schools or are influenced by them. The contention is that the certificating system efficiently administered must lead to comparison and exchange of methods.

The specific channels through which the exchange of views has taken place are: high school courses of study, bulletins on the teaching of different subjects, suggestions for laboratory equipment and the selection of suitable problems, library references for literary subjects, correspondence between instructors in the colleges and teachers in the schools, and personal conferences with teachers, superintendents and school boards by high school visitors.

The records of the nine universities examined show that one of the first steps taken after the adoption of certification was along the line of adjustment of high school courses of study and the college entrance requirements. In 1875, Michigan suggested the advisability of reviewing Algebra and Geometry in the senior preparatory year; in 1881, the University Faculty was called upon by the High School Board of Minnesota to assist in the preparation of a course for high schools; and in 1888, a joint meeting of University instructors and high school supervisors adopted a course of study to be used in the high schools

¹⁶ Catalogue, University of Michigan, 1870-1871, p. 127.

of Iowa. It may be safely concluded that certification has had much to do with adjusting courses of study in high schools to courses of instruction in the colleges and *vice versa*.

The service rendered by the colleges to the schools has not been limited to counsel concerning the selection of subjects; it has extended to equipment and methods. More than a score of state universities have issued high school manuals. These manuals are usually prepared by college teachers who have had experience in high school work; thus two standpoints are held in mind in the suggestions made. These manuals are more suggestive than prescriptive. For illustration, much larger numbers of classics, laboratory exercises, units of work and subjects are suggested than are required for admission. The schools may make modifications, adaptations or substitutions. Under such conditions methods of teaching may be improved and based upon interest rather than upon an extrinsic basis or the preparation for the ordeal of a college entrance examination. In the benefit of the change colleges as well as schools have shared. Good teaching in colleges leads to better teaching in the high schools, and better teaching in the schools spurs to improved methods in the colleges; and, where the higher and the lower parts of the system are united the instruction in both tends to be improved by the contact of one with the other.

In recent years the method of working by conference has grown in popularity. The same principle may be applied between teacher and student in the class-room, between university visitor and school superintendent, between committees representing both the colleges and the schools or even in large assemblies where high school representatives and college instructors are gathered together. Here the idea of authoritative domination does not control; but, free discussion is allowed. Under such conditions the search for truth becomes a cooperative undertaking. Many of the certifying institutions hold annual high school conferences. The conference in Illinois has sometimes had a thousand high school teachers in attendance. The meetings are held at the University of Illinois, and, probably no other influence in the state has done more for the elevation of standards and the adoption of better methods in teaching. But for the close contact between the schools and the University

through certification, the organization would probably not be in existence.

It may be objected that the certifying system has not been responsible for the changes mentioned, and that the examination system might perform the services mentioned. No better reply can be made than to set forth some of the fundamental characteristics of the two systems. The examination system is the one of tradition and tends to hold to a rigid exaction of a few subjects; it would allow few liberties to the schools in the adaptation of courses of study to local conditions. The certifying system has not only permitted but has assisted in the broadening of high school courses of study. Admission by examination suggests distrust in the judgment and ability of high school teachers; admission by certificate implies confidence in the ability and integrity of the teachers in the lower schools. Because of this factor the certifying institutions will have an advantage in councils of high school people and will be better able to wield an influence upon the methods of the schools. The examination system has never seriously contemplated the visitation of schools; the true certifying system by its very nature demands a vital touch with the schools, and this demand can only be met by sympathetic visitation. The examination system is one largely of domination; the true certifying system is one of cooperation.

EVALUATIONS OF TEN TYPES OF CERTIFYING SYSTEMS

The New England College Entrance Certificate Board

If success in doing a passing grade of college work is made the test, the plan of certification practiced by the New England colleges leads all others reported in the United States. This judgment is based upon the facts submitted in Tables XVII, XVIII, and XIX of this study. The average per cent of failures in New England colleges for four years was 7.1, the average per cent of failures in California for the same period was 12.96, while the failures of certificated students for seven years at the University of Michigan reached 11.64 per cent, and for the last two years reported the per cent of unsatisfactory work dropped to 9.44.

The New England system throws the entire responsibility for

the certificated students upon the teachers of the preparatory schools. This causes extraordinary caution on the part of the certifying teachers because of the constant danger of losing the certifying privilege. The system does not reach a large per cent of the New England high schools.¹⁷ E. A. Balentine, University of Maine writes: "The weakest point in the entire system is, that some high schools that are doing a high grade of work, either do not apply for approval, or are not accepted by the Board because some of their graduates may have failed in college work, thus depriving really good students of the privilege of being admitted by certificate."¹⁸

The Board does not attempt to visit schools, and whatever influence it exerts in the development of courses of study and methods of teaching is wielded purely from the standpoint of admission to college and not from the standpoint of the local development of the high schools. The system is one-sided and deals with the schools largely, if not wholly, on a selfish basis. Notwithstanding its weaknesses and a certain unpopularity with both schools and colleges, the system secures, on the whole, as shown by the data submitted in Table XVII, a class of students better prepared for college work than those admitted by examination.

But since the system lacks the elements of school visitation, a willingness to have schools judged by any other standards than the single test of college work, and an indisposition to join in the development of a completed system from any other than the college standpoint, it does not seem probable that, in its present form, its services will ever be as great as those of some of the systems operating in other parts of the United States.

Control by State Board of Education

By a state board, as here discussed, is meant an educational body and not an ex-officio political organization. A good example of the former is found in Indiana. The Indiana Board is composed of the Governor, the State Superintendent of Public

¹⁷ The High Schools of New England as Judged by the Standard of the College Entrance Certificate Board, Walter H. Young, *School Review*, Vol. 15, p. 134.

¹⁸ Proceedings of the Association of Colleges and Preparatory Schools of the Southern States, 1910, p. 88.

Instruction, the President of Indiana University, the President of Purdue University, the President of the Indiana State Normal School, the superintendents of schools of the three largest cities of the state and three members, one of whom must be a county superintendent, appointed by the Governor.

Such a board as has been designated possesses many commendable features. At least eight of the eleven members are sure to be deeply interested in educational affairs. The Governor and his two unrestricted appointees may be no less interested in education than their associates on the board.

This board through its several members comes in direct contact with the people on one side and the highest educational interests on the other. More especially through the Governor and the State Superintendent it may reach the legislature; through the city superintendents and the county superintendent, the lower schools are represented; and through the college presidents, the higher institutions join in the formation of the educational policies of the state. With a board thus constituted, in control, there is apt to be a minimum of friction between denominational schools and state institutions, between normal schools and colleges and between the higher and lower parts of the state system.

The chief advantages of such control may be summarized as follows: (1) it is representative, (2) educational, (3) largely non-political, and (4) it should make for peace and cooperation among all of the educational interests of the state.

The weaknesses of such a board do not seem to be in its constitution or organization but in its methods of administration. The first mistake may occur in assuming or accepting control over certain details of administration in the several state institutions. A second error may be made in attempting to perform all sorts of legislative, judicial, and executive functions through its own members.

The state board of Indiana makes the rules governing the commissioning of high schools, fixes the course of study, and visits the schools for the purpose of seeing that its own regulations are obeyed. These conditions have brought about almost a complete break between the high schools and the colleges so far as direct inter-relation and cooperation of the faculties are con-

cerned. The University makes little attempt to visit schools or to influence them directly in adjusting courses of study or in improving methods of teaching. The board stands between the schools and colleges, and by its methods of administration bars the way to direct mutual cooperation.

The University has largely turned over the control of its entrance requirements to the State Board. The Board must legislate in the interest of the weak colleges as well as the strong. The minimum requirements of the Board tend to become the maximum requirements of the University for admission. As a result of this condition the University of Indiana can have little to do with the advancement of educational standards in the State.

The University nominally requires sixteen units of high school work for admission. Eleven of the units are prescribed and five units are elective. "For the elective portion of the entrance requirements any subjects taught in a commissioned high school, and credited by such high school as part of the regular four-year course, will be accepted."¹⁹ The rule of the State Board concerning the qualification of teachers in commissioned high schools reads as follows: "At least two teachers must give all their time to high school work. One of the teachers in the high school must be a graduate of a college course that requires at least three full years of work beyond graduation from a commissioned high school."²⁰ It can not be said that the requirement of but one college trained teacher in a commissioned high school assures a high standard of work.

The University has surrendered the entire control of five units and has deferred the supervision of all its requirements to the State Board. The reply may be made that the University is at fault and not the Board. From the minutes of the State Board for May 5, 1873, we obtain the following: "Resolved, that the State Board of Education recommend the Trustees and Faculty of the Indiana University, in order to unite the high schools of the State and the University more closely together, to so modify the preparatory course of study, as to admit students to the Freshman class without the knowledge of Greek,

¹⁹ Catalogue, 1911, p. 77.

²⁰ Uniform course of Study for the Commissioned, Certified and Accredited High Schools of Indiana, 1910-11, p. 6.

putting in the place thereof an equivalent, in the increased amount of mathematics and science." Certainly few will find fault with this action of the Board, but this was merely the opening wedge which finally took from the University the *bona fide* control of its own entrance requirements. A step originally intended to unite the University and the high schools has created a neutral ground between the higher and lower institutions over which the State Board has complete control.

It is believed that any state board will make a mistake when it permits itself to become responsible for fixing a maximum standard for college admission requirements, and that higher educational institutions are in error when they surrender to any external authority the responsibility for the maintenance of their own standards of admission.

Another mistake which it is believed may be made is also illustrated in the work of the Indiana State Board.

That Board assumes entire responsibility for the inspection of schools. The schools of the state are divided into ten lots and each member, with the exception of the Governor, visits a certain list of schools. The first error seems to occur in assuming that each of the ten members who visit schools possesses adequate expert knowledge to render real service to the schools. This statement in no way impeaches the efficiency of the members in their respective fields. It is not enough to be able to assist the weaker schools; the best may be improved by wise counsel. Granted that all members are competent, they must sacrifice other duties if they do the work. The view is here taken that presidents of colleges and superintendents of large cities should not be called upon to do work for which experts are at least as well suited and leave their own fields for the length of time required. In 1910, there were 328 commissioned high schools in Indiana. To visit these schools two men would be required to visit 32 schools each and eight men would each need to visit 33 schools. This would make no allowance for the visitation of "accredited" and "certified" high schools of which there were 171 in the State. Should these schools be visited each of the ten members of the Board would be compelled to spend at least fifty days in the field. To say that the Board does visit the schools will not meet the objection here

raised. The question is, can they be properly spared for so many days from their regular work?

Another objection to Board visitation should be mentioned. Ten men with different training and different interests must vary widely in standards, but the higher institutions have no way of equating the standards of schools commissioned on the recommendations of the different members of the Board.

It seems fair to conclude that an ex-officio, educational, non-political state board may be an efficient body for the selection of lists of accredited high schools, but that when such board leads the higher institutions to give up the establishment and control of their own standards for admission, or when the Board attempts to perform all administrative functions through its own members, even to the visitation of schools, it places itself upon decidedly questionable grounds.

The Selection of Certifying Schools by a High School Board

A high school board as here treated differs from a state board of education in that the former deals with schools exclusively whereas the latter may have charge of the certification of teachers, the selection of text-books for the state or similar duties. The type of board here considered is found in Minnesota.

The Minnesota State High School Board is composed of "the state superintendent, the president of the state university, and the president of the board of normal school directors, ex-officio, and the superintendent or principal of a high school, and one other person appointed by the Governor and confirmed by the Senate. . . ." ²¹ This Board with the exception of the President of the State University is appointed by the Governor and approved by the Senate. The different members are not necessarily appointed at the same time. It should be noted that the State Superintendent as well as the directors of the state normal schools are appointed by the Governor.

It may be said that the Board is representative in so far as different grades of educational institutions are concerned. It is educational since at least three of its five members must be actively engaged in educational work; it will be political or non-

²¹ School Laws of Minnesota, 1907, p. 106.

political in accordance with the wishes of the Governor and the Senate. While principles of organization and administration are the only proper subjects for treatment in this study, it may be noted that the Minnesota High School Board enjoys the confidence of the people notwithstanding the opportunity given to the Governor of the State to make political spoils of its membership.

The Board employs three expert inspectors of schools. One gives his entire time to high schools, one looks after the graded schools, and the third divides his time between the two fields. These inspectors work directly under the supervision of the Board and have no direct connection with either the state department or the state university. As stated in a former chapter, an extensive system of examinations is conducted under the auspices of the Board.

There is no doubt but that the Minnesota Board has rendered an inestimable service to the State. This fact, however, does not win for it an unqualified endorsement. One criticism made upon the Indiana system was that the members of the Board attempt to do all school visitation. The same objection can not be made to the administration of the Board in Minnesota, since it employs special inspectors. These inspectors put in all their time in the schools and have little direct touch with college and university faculties.

The High School Board distributes large annual sums to approved state high schools. Its regulations in most instances are worthy of the highest commendation. But under the heavy pressure brought by local communities, the Board is forced to make measurable physical standards, to a considerable extent, the basis of classification. Inspectors are compelled to give much of their attention to the physical side of the schools. As a result the records of the University of Minnesota for the last ten years or more show considerable dissatisfaction with the preparation of applicants for admission. At present, graduates of high schools are divided into three classes and only the two highest classes are admitted to the University on certificate. There is a certain separation between the schools and the uni-

versity which should not exist. The vital touch between high school teachers and university instructors is lacking.

All of the organization necessary to the highest degree of efficiency is present. It is believed that if the High School Board and the University would join their forces along the lines of establishing in the schools the best teaching methods, and measure the schools somewhat more by scholastic standards, a greater service might be rendered to the educational interests of the State.

Control of Certification Through State Associations of Colleges

If state boards of education and state high school boards turn their attention more to the schools than to the colleges, the reverse is true in the case of college associations. Such associations do strive to assist the schools but in a somewhat indirect way. They induce weaker colleges to raise entrance requirements and thus leave pupils in the high schools for a longer period of time. Some standardization is achieved through announcements of uniform state accrediting systems. In some states, a serious attempt is made by the associations to visit schools; in other states, this work is not undertaken at all.

Some of the weaknesses of this system are lack of funds for visiting schools and issuing publications, a tendency to regard weak and strong colleges with equal favor and thus hold down the higher standards as well as pull up the lower ones, and a disposition to surrender the individuality of institutions. A disadvantage is also encountered from the standpoint of dealing with the schools when public and private institutions are associated together. Private colleges often support preparatory schools; and should these fail to receive approval of the entire association the colleges are likely to become embarrassed.

It would seem that college associations may find their greatest field for service in the development of standards in the higher institutions. They may also render a valuable indirect service to the schools. They may not be expected, however, composed as they must be of both privately and publicly supported institutions, to deal with the highest development of state school systems in the most efficient manner.

The Selection of Certifying Schools Through State Universities

The state university, in common with the other certifying systems, possesses both advantages and disadvantages. The disadvantages will first be considered.

If the state university possesses lower standards than other institutions in the state, it will be criticized as unworthy of the trust of selecting the accredited list of schools for the state; if it does maintain correct standards, it may be criticized by competitive institutions, and the schools may be incited to complain because of a pretended undue rigidity. In some states normal schools, in others denominational colleges and in still others state departments have bitterly opposed the visitation of schools by state universities. In some cases the opposition has been based upon legitimate grounds and in others upon selfish interests. The opposition, so far as it has been patriotic, has arisen because of a clearly manifested selfish interest in the schools, a disposition to be unduly dominating, or a clear lack of efficiency in dealing with the schools. The lack of efficiency may be due to want of sympathy for the school standpoint manifested in a refusal to assist the schools in caring for local interests; it may be due to ignorance; or it may be traced to the absence of a disposition on the part of the universities to spend sufficient funds and use enough men to do the work.

It is confidently believed that not a single state university in the United States has met all needs in dealing with the schools. For this reason, state departments and other colleges have come to employ inspectors. The claim that universities have not had sufficient funds is not always valid. It is believed that a little more money spent in behalf of the schools would bring greater funds to the support of the universities.

The greatest weaknesses in the selection of lists of accredited schools by state universities may be summarized as follows: (1) failure to maintain standards; (2) danger of arousing the opposition of normal schools, other colleges and state departments; (3) a disposition to use visitation as a means of securing students rather than as an opportunity to serve the schools; (4) an undue tendency to dominate high school conditions; and (5) down-right lack of efficiency due to the selection of visitors or

inspectors or due to failure to provide means and men to meet the reasonable needs of the work.

The advantages of state university selection may now be mentioned.

In the first place the state university is placed by the whole people at the head of publicly supported institutions. The members of its faculty are, or should be, the educational leaders of the state in their respective fields. The university is supported by the people of the state as are the lower schools. The funds appropriated may be used in the betterment of the entire school system. The state university and the public schools are intended to serve no particular class, creed or sect, but the entire people. Here is a complete community of object and interest.

Some of the more fundamental reasons for a classification of schools, on the purely educational side, by state universities may be recapitulated under the following headings: (1) the university, on the scholarship side, stands at the head of the state system; (2) the support of the higher and lower parts of the system comes from the same source; (3) the work of the university is a continuation of the work of the lower schools, and in order that both parts of the state system may function properly there should be a constant exchange of views and methods; and (4) no external authority should be inserted between the two parts of the system either by bottling up the services of the university within walls or limiting its control of standards of entrance requirements, or through permitting jealousies and ambitions of other institutions to weaken the entire state system by breaking the vital connection between its parts.

Control of Certification Through State Departments

Within the last few years efforts have been made in several states to place the visitation and classification of high schools entirely with state departments of education. The movement may be traced to different causes. In certain states, legislatures have provided funds for the subsidization of schools. These funds are distributed to schools meeting certain minimum standards. The determination of standards has been assigned in some cases to state departments. In order for the depart-

ments to make the tests required it is necessary to employ inspectors of schools.

Once clothed with the duty of school visitation, the departments have become ambitious to control all high school standards, and in some states have sought to have such legislation enacted as would not only give them power over schools but also such as would prevent state universities from having anything to do with the work of the schools.

School laws usually clothe the state superintendent with the full responsibility for the administration of all public schools. Under the laws the superintendents are at liberty to undertake any work that may contribute to educational development; and, feeling the need of closer supervision, they turn to school inspection and classification.

In some cases the low standards of universities or jealousies of other colleges have caused the inspection of schools to be placed with state departments. Whatever may be the different causes there is little doubt that there is at present a strong tendency in some parts of the United States to locate the inspection and classification of high schools with the state departments. This means practically the selection of schools which may certify students to the state universities.

The advantages of control of certification through state departments seem to consist in a prevention of friction likely to rise among various educational institutions, in an opportunity to compel the establishment of certain minimum standards, and in a general expansion of the influence of the state departments.

The disadvantages of state department control of certification do not have their foundation in an exercise of the department's legitimate functions but in an effort to go beyond its inherent ability to render service. The state department, on the purely educational side, is not above the state university; the composition of its office forces is inferior to that of the university faculty considered from the standpoint of training and intellectual ability. Since state departments are not above universities intellectually, they should not attempt to dominate their standards. When the departments insert themselves between the high schools and the universities they break the connection between the lower and higher parts of the state system.

They may very properly inspect the physical side of all educational institutions, they may enforce the legal minimum standards, they may properly inspect schools and use all of the power at their command to better educational conditions in every way, but when they refuse to permit the universities to control their own entrance requirements and to assist in the upbuilding of the entire system they clearly forbid that which they are not able to do themselves.

State departments are more subject to political changes than are the standards of universities. Many educational needs arise which must be met by legislatures. State departments are usually the channels through which school laws are urged. They are not so strong in dealing with individual local schools as is an institution further removed from the vicissitudes of immediate political favor. Office forces usually change with the state superintendents and a continuous policy in dealing with the high schools is almost impossible.

When schools meet the minimum legal requirements administered by the state departments they are inclined to feel that they need do no more. When the higher institution is working with the schools there is a continuous pull toward higher and higher standards. When the state departments cut off the connection between the two parts of the system they are likely to substitute a fixed minimum legal standard for an ever-increasing maximum standard.

There is every reason why state departments should visit schools, enforce minimum standards and go as far beyond as possible. They may accomplish much for the physical side of the schools, and should not be restrained from doing their utmost for the intellectual side. But it should not be overlooked that they are prescribed by limitations. When they attempt to perform services for which they are not prepared, and when they force legal enactments which separate two closely related parts of the state system, when they refuse to permit the lower and higher institutions to work together, they not only arrogate to themselves duties they are not able to perform but prevent other agents from rendering this legitimate service to those who support them.

Joint Control of Certification Through State Universities and State Departments

The control of school visitation and high school classification may be shared by state universities and state departments in the following ways: (1) the professor of secondary education in the university may visit schools under the auspices of the state department, as in West Virginia, Arkansas, Florida, etc; (2) the university and the state department may employ their own inspectors who exchange reports and cooperate in their work, as in several states in the West; and (3) the state department may limit its work more to the smaller schools and the university may look after those schools which with proper assistance may prepare students for higher work.

The first method is strong on the side of foundation and original organization of new schools, but it is weak in the work of development of the better schools already in operation. The inspector is not usually in close touch with a higher teaching body from week to week and consequently must base his work almost entirely upon his own personal standards. His time is largely occupied with non-scholastic or elementary-scholastic work and he soon becomes unfit to inspect a large system of schools and render expert assistance. The work he performs is invaluable to the state but does not contribute so much to the improvement of higher standards in the better high schools.

Unfortunately the double system of inspection does not seem to work satisfactorily. Either the two sets of inspectors work independently and, to a certain extent, go over the same ground, or when they attempt to work together in an effective manner there is a constant danger of friction. The university inspectors are likely to be more rigid than the state inspectors. The department inspectors are apt to be more subjected to the requirements of popular favor. They are subject to changes in the political fortunes or misfortunes of the state superintendent, and usually do not enjoy the same support in exacting a high standard of work as do university inspectors.

In a few states the state departments confine their work of inspection and classification more to the weaker schools and leave the stronger ones to university guidance. This plan brings

best results. The constitution, organization, and methods of work of the state departments are better adapted to the foundation and original organization of schools than to their highest scholastic development. By the very nature of the state department it can accomplish more for the physical side than for the purely intellectual side. The university, on the other hand, must render its service along the lines of refinement of intellectual standards. It can render a service not within the power of the state department. And for the state department to attempt to deprive the state of one of the most valuable services that the university may perform, either by forbidding that service, or by failing to insist upon its rendition, seems, to say the least, unpatriotic.

Special Methods of Control by Individual Institutions

In an earlier chapter may be found outlines of the plans used by Harvard, Columbia, and Vanderbilt universities and the University of Chicago. All of these methods hold in view the welfare of the colleges rather than the specific development of high schools. This study is made from the standpoint of the development of a complete educational system. It is claimed that in order to achieve this end there must be a constant vital connection between the two parts of the system.

The Harvard and Vanderbilt plans do not contemplate any systematic visitation of schools. They do accept and weigh certain reports made by school officials. They do not measure up to the standards of a pure certificating system, but they represent a distinct step away from the old fixed form of examinations. The advantages and disadvantages of the Vanderbilt plan are practically the same as those discussed under the New England College Entrance Certificate Board. The Harvard plan simply provides for absolute freedom to schools in all but four subjects without attempting in any way to direct or influence the school work.

The Columbia plan contemplates some visitation but with the purpose of ascertaining school conditions, without attempting to render any particular service to the schools. The advantages of the Columbia plan are enjoyed by individual students rather than by schools.

The University of Chicago for years visited schools and rendered much valuable service in the better adjustment of courses of study and in the improvement of methods of teaching. The new plan does not involve school visitation, but expects teachers to leave their schools and visit the University of Chicago for advice and inspiration. Even though the University should pay the traveling expenses of visiting teachers, the conditions in Chicago class-rooms and the general environment will be so different that teachers will be apt to find the results of their visits will pertain more to ideas relating to Chicago and the University than to conditions in their own schools. The probabilities are that the University of Chicago will profit far more by the new plan than the high schools from which it will draw its students.

The advantages of the special systems described seem to relate to the higher institutions rather than to pertain to any well defined plans for the development of closely co-ordinated school systems.

Control Through District Commissions

District Commissions may assist in standardizing state systems. They deal with the best schools and furnish a goal toward which the better schools may strive. They are based upon the state systems and possess no principles not already discussed. Educational leaders in the Middle West are practically unanimous in the opinion that the Commission of the North Central States has performed a distinct service for the schools and colleges,—for the schools, by inspiring them to standards of efficiency, and for the colleges, by giving to them a large list of the best schools which is an advantage in administering the admission of students from other states.

A National System Suggested

Almost all colleges and universities are coming to admit students on certificate, from other states, who have graduated from high schools accredited by their own state universities. This practice often leads to mistakes. So widely different are the standards in different states that affiliation with state universities may mean little or much according to the requirements of the several institutions.

A commission working under the National Association of State Universities could, in fact, solve the problem. The commission could be organized upon the plans in use by the district associations. Only the better schools in the different states would be accredited. Such a commission could suggest such standards as would make membership a desirable asset to the most efficient high schools. This would be an additional step toward a nationalization of high school standards.

Final Conclusions

I. The general plan of admission to college by certificate is not a product of chance device; it is the result of a distinct need for uniting the preparatory schools and colleges into one closely connected system. This need does not pertain to one part of the system more than to the other. The schools need the assistance of the colleges in the acquisition of better methods and standards; the colleges need the knowledge of the schools with reference to their prospective students.

II. For forty years various boards, state universities, state departments, and independent colleges have been developing different types, principles and methods of admission to college by certificate.

III. Some system of certification is now used to some extent and in some form in every state of the Union, and in all higher institutions of learning with the exception of less than a half dozen independent colleges along the Atlantic Coast.

IV. The various systems in the United States may be classified under certain well-defined types. The two fundamental principles upon which the systems may be classified are the location of control for the visitation and selection of accredited schools.

V. The various types of control have evolved systems varying widely when considered from the standpoint of the highest efficiency.

VI. While the different systems possess some elements of efficiency, all of them are burdened with more or less grave defects. Some are weak because of legal enactments, some because of insufficient funds, some break down because of lack of effective school visitation, and still others are weak because

of their forms of organization. Some of the systems are conducted by colleges for purely selfish reasons and only indirectly and indifferently render service to the schools. This may be true of state as well as of independent institutions.

VII. Notwithstanding the weaknesses inherent in the prevailing systems, the reports of the New England College Entrance Certificate Board and the investigations concerning the records of students admitted by certificate and examination in different universities show the superiority of the certifying system over the method of admission to college by examination.

VIII. The following fundamental principles underlie all efficient systems:

1. The source of control must be competent, efficient, and beyond the reach of other than patriotic and educational influences.

2. The system must be sufficiently complex and detailed to test and to assist the schools, and to furnish to the colleges complete information concerning the records, abilities and personalities of prospective students.

3. The work must be done with reference to the welfare of all concerned; that is, it must consider the interests of schools as well as of colleges, and the good of those who will not go to colleges as well as of those who will study in the higher institutions.

4. No external authority, such as statute, state department, or state board should be allowed to come between the school and the college. The two teaching bodies should come together in vital and reciprocal contact.

5. The connection between high school work and college classes is not mechanical. It can not be made by state laws; it must be adjusted by the intelligent cooperation of high school teachers and college instructors. Unless the connection is made in this way, admission to college by certificate becomes a farce, and like broken bones improperly set forever leads to maladjustment between the two parts which should logically fit into each other.

IX. In view of the existence of various types of certifying systems possessing different grades of efficiency, it seems

improbable that any one type will soon supplant all others. The immediate problem is a matter of better organization, better adaptation and further development of prevailing systems.

X. In some states the services of the higher institutions are not utilized. Where such conditions exist a fatal defect in the system of certification may be found. In all states where state boards or state departments are in control, a just and proper service should be rendered to the schools and colleges by not merely permitting but by inviting the cooperation of all state colleges in the work of high school development and high school classification.

XI. A study of various types of systems in use in the United States leads to the belief that in different states the following methods of control may be made efficient:

1. In states where the state universities maintain high standards and have worked with the schools for years and enjoy the confidence and support of the people, the schools and other institutions of learning, the work of visitation and classification of schools may be conducted with best results under the auspices of such state universities.

2. A successful and advantageous control may be shared by state universities and state departments of education. Under this joint control, the state departments should give especial attention to the physical side of the schools, to the provision for the foundation and organization of different types of high schools, to the enforcement of minimum legal requirements and to the visitation and inspection mainly of the smaller schools, while the higher and more refined scholastic standards of the stronger schools should be looked after by the universities.

3. High school or state boards may safely be entrusted with the general administration of certification only when the universities are called upon to assist in the maintenance of standards. When boards undertake to carry on the entire work of inspection and classification without the cooperation of educational experts in all lines of high school work their own standards become mechanical and turn to the physical side, rather than to measures of real educational achievement. High school or state boards work-

ing in conjunction with college representatives may advantageously control the visitation and classification of schools and provide successful systems of certification.

4. In addition to the three forms of state systems suggested, district systems may be exceedingly helpful in toning up the systems of different states and in giving to the best schools a higher goal than mere state recognition. Such systems also furnish to universities and colleges an opportunity to protect themselves against the low standards prevailing in other states.

5. A commission working under the auspices of the National Association of State Universities could render a service to the entire United States similar to that performed by district commissions.

XII. No system of certification which does not regard the welfare of the schools and colleges alike and which does not bring them together in intimate cooperation for the upbuilding of the entire school system will meet the demands which gave rise to the fundamental idea of admission to college by certificate.

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